

FIG. 1A

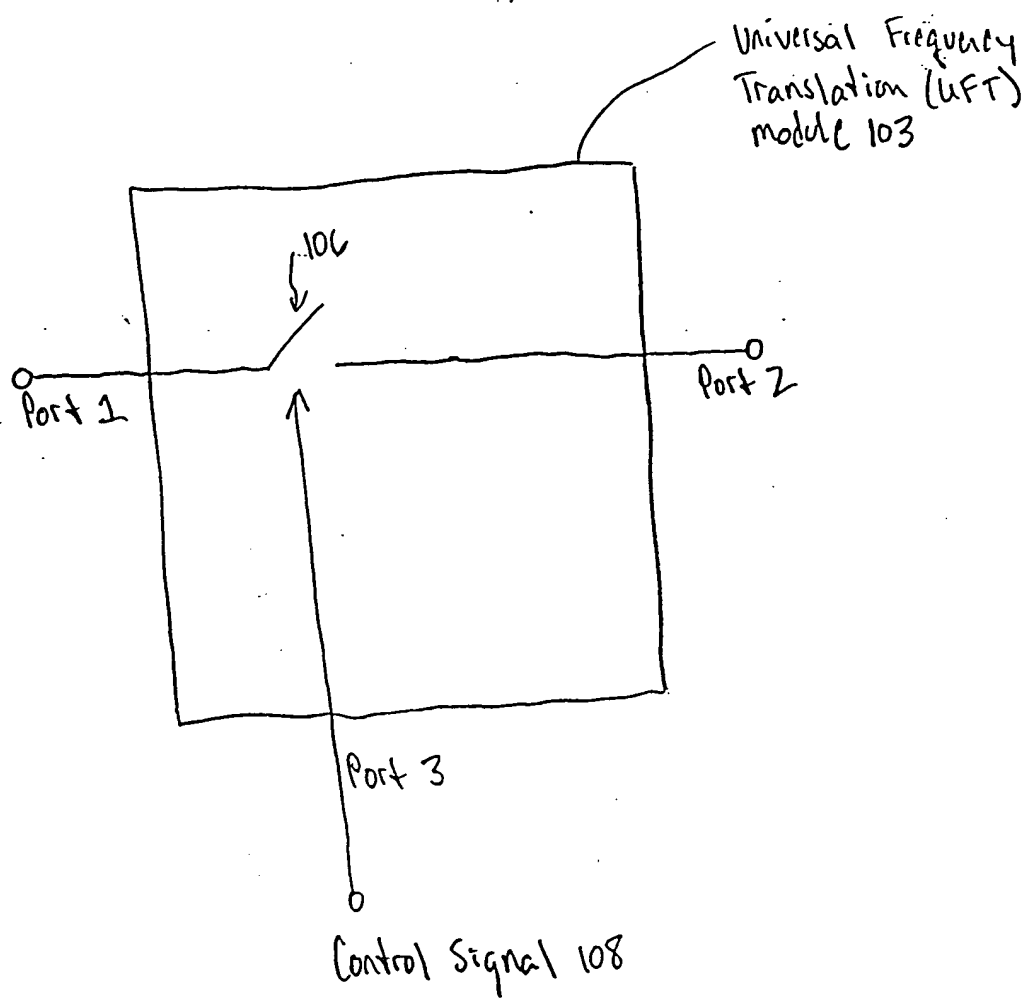


FIG. 1B

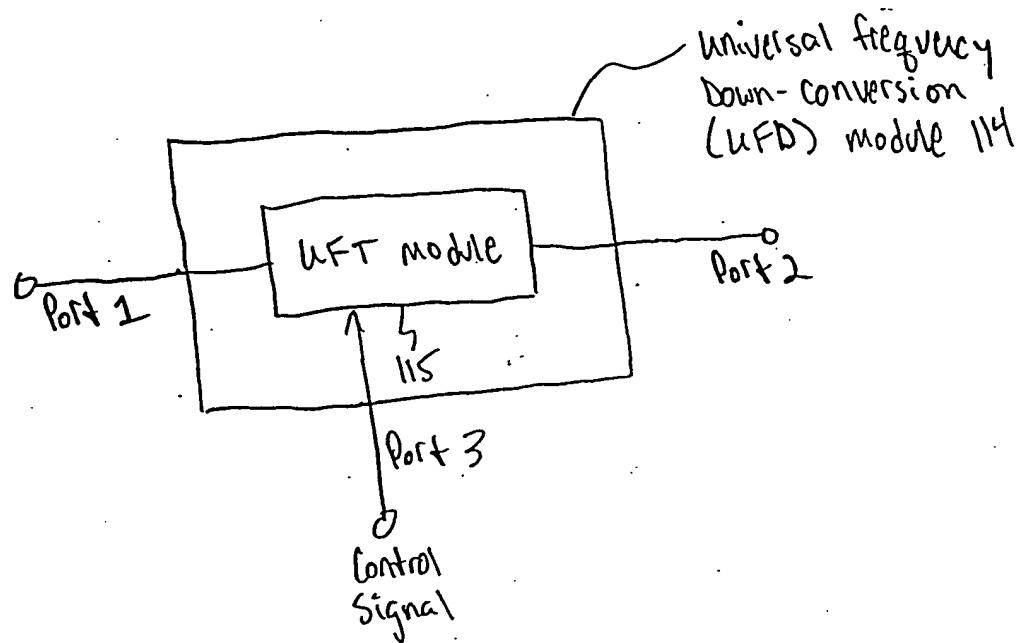


FIG. 1C

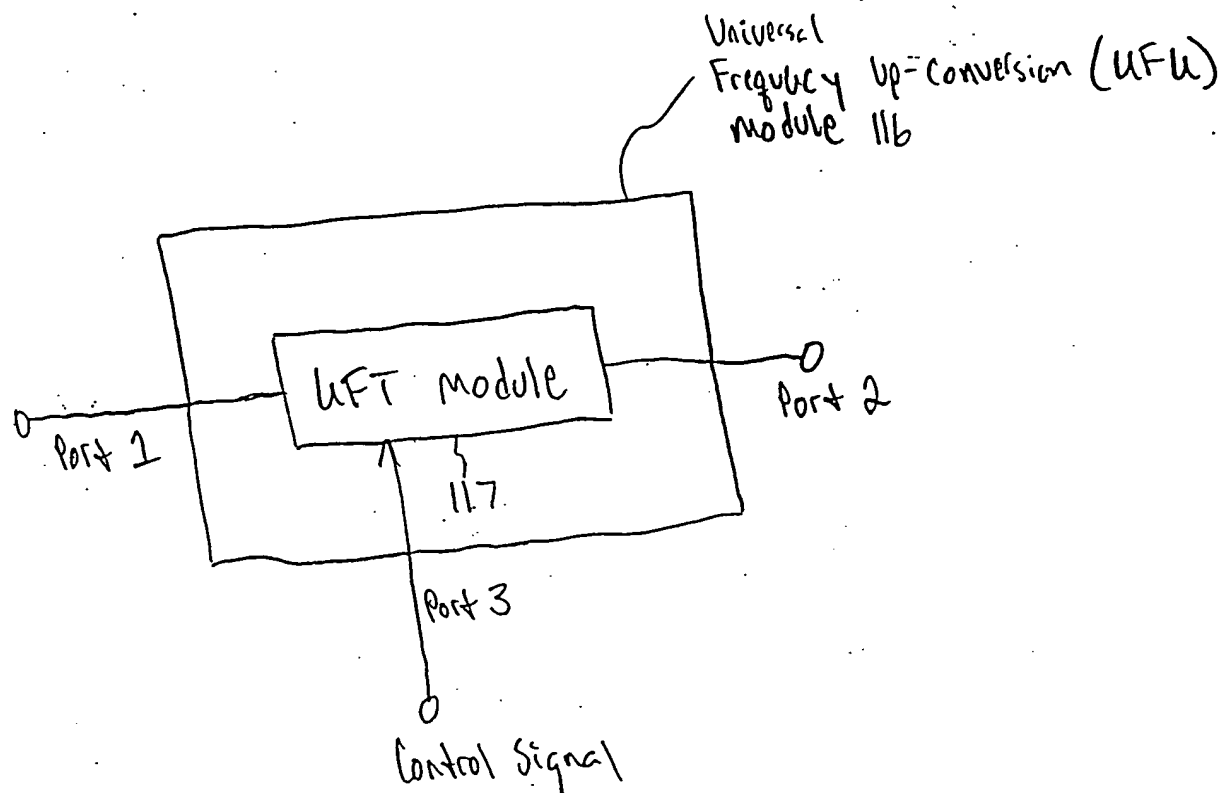


FIG. 1D

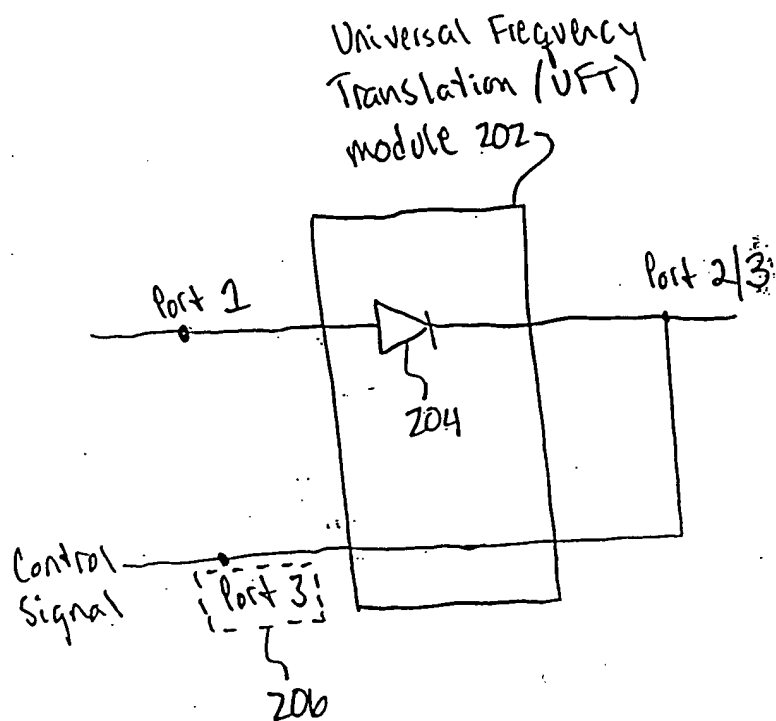


FIG. 2A

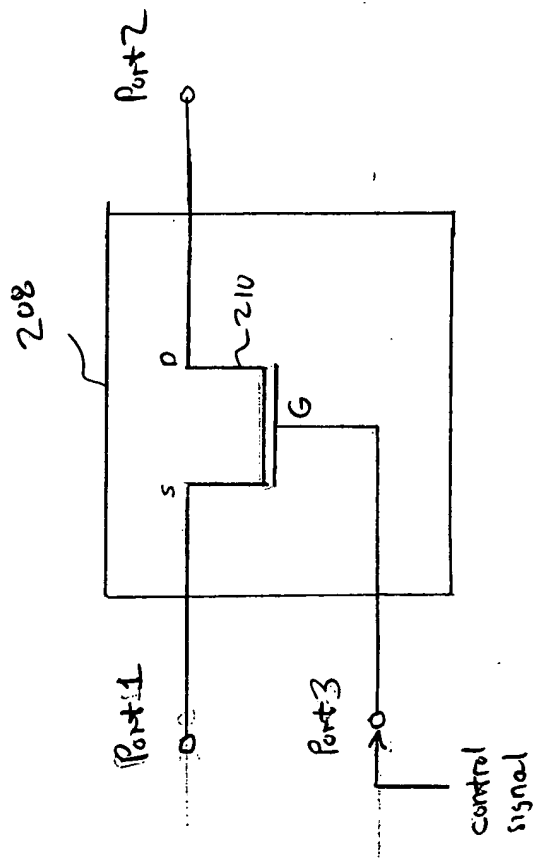


FIG. 2B

Universal Frequency
Up-Conversion (UFU) module 300

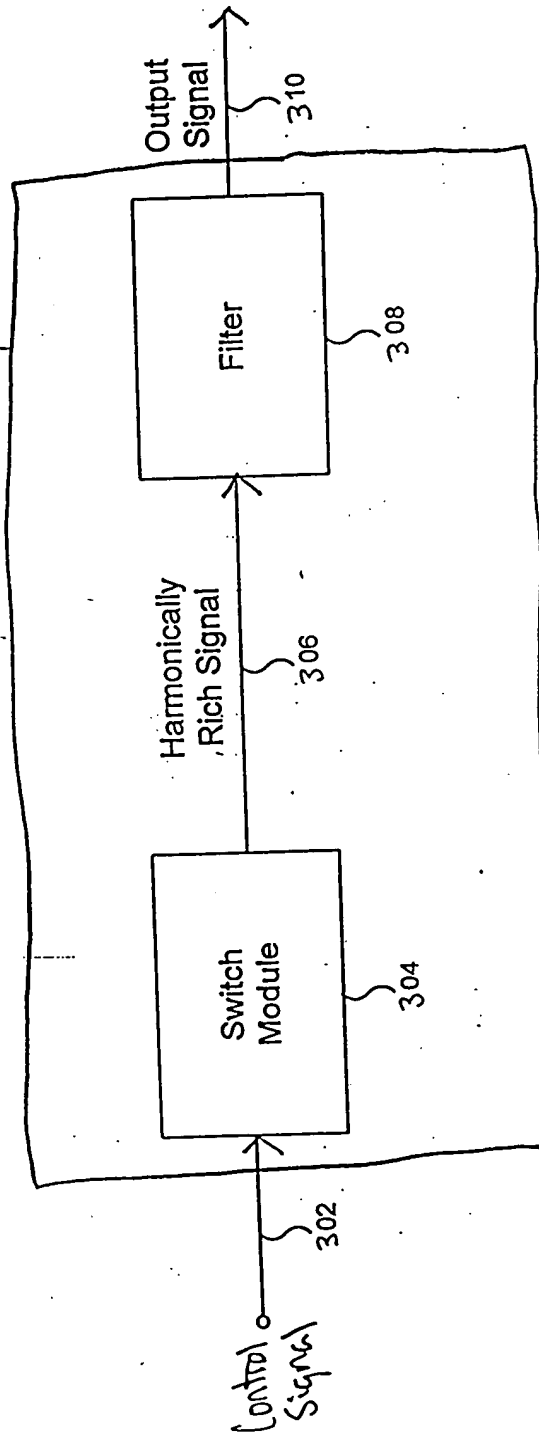


FIG. 3

Universal Frequency
Up-conversion (UFC) module 401

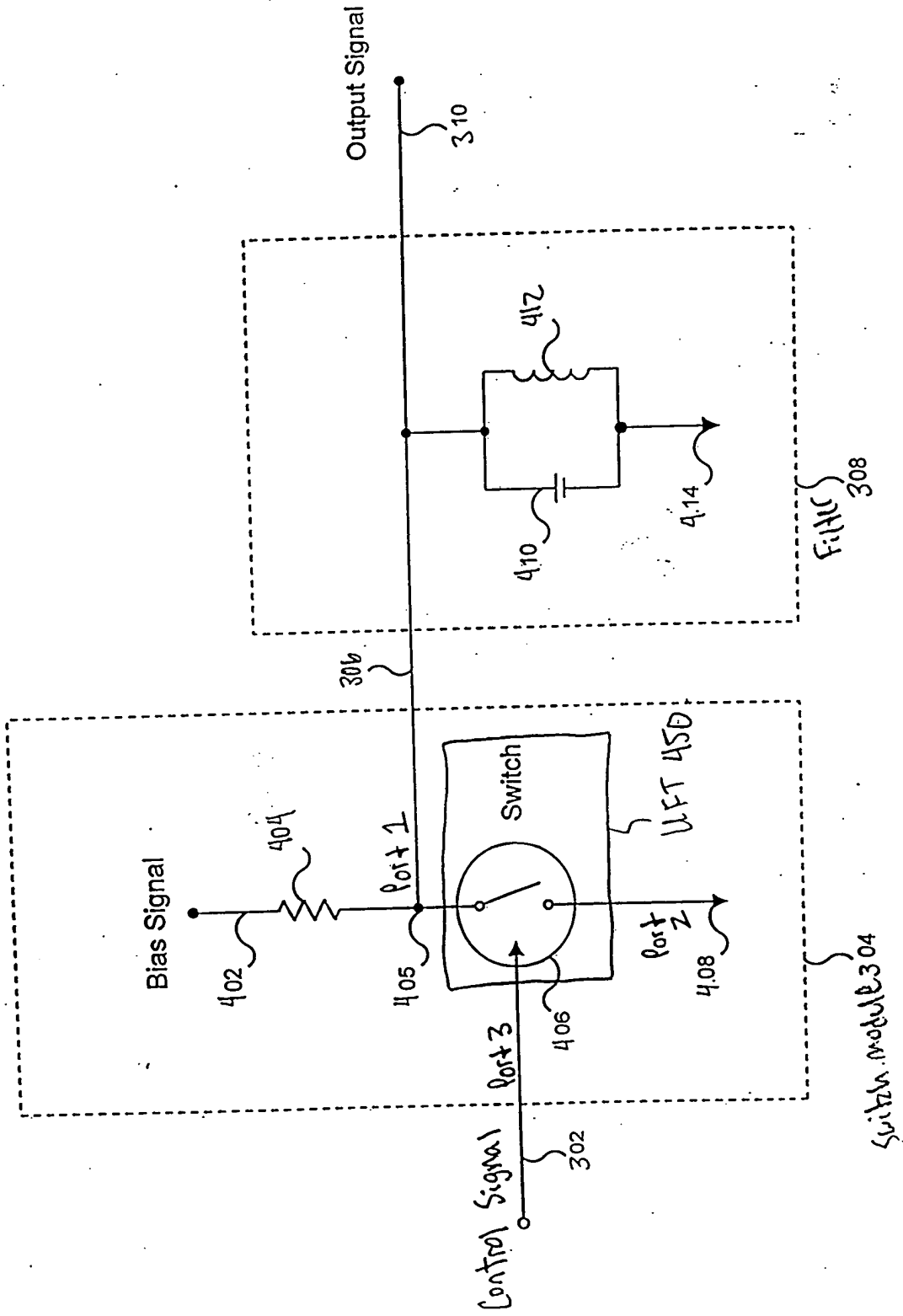


FIG. 4

Universal Frequency
 up-conversion
 (UFW) module 590

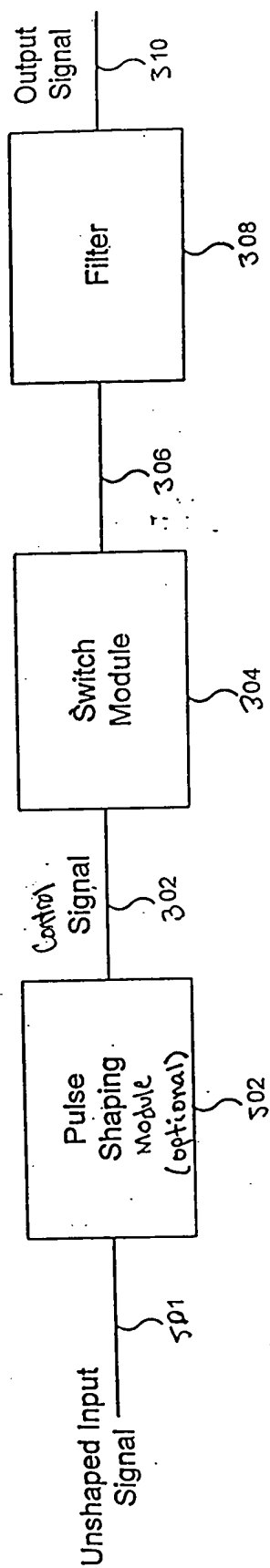


FIG. 5

EXPANDED VIEW OF
HARMONICALLY RICH
SIGNAL 608

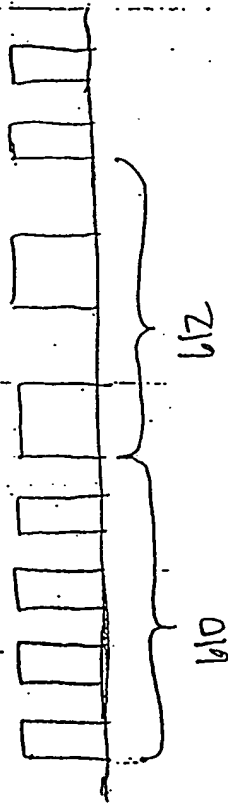
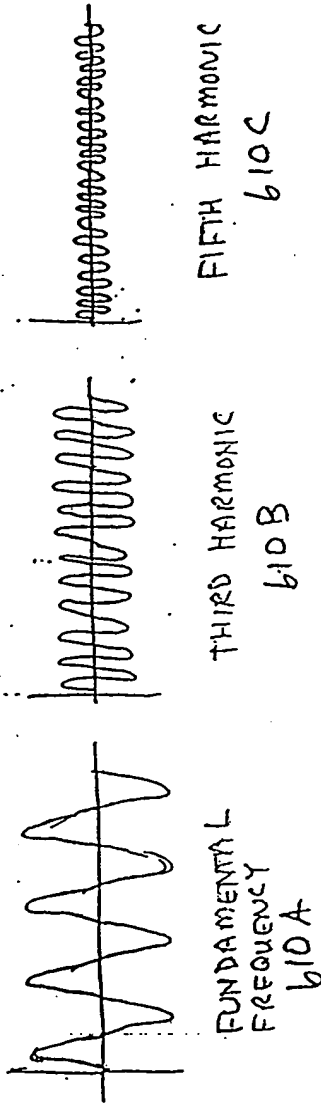


Fig. 15

११. डि. ए. ए.

HARMONICS OF
SIGNAL 610
(SHOWN SEPARATELY)

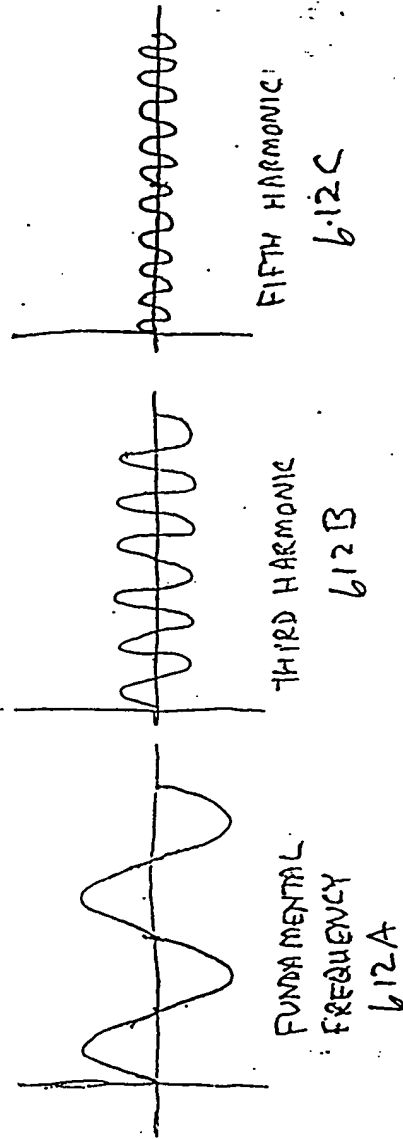


FUNDAMENTAL
FREQUENCY
610A

THIRD HARMONIC
610B

2019
FIFTH HARMONIC

HARMONICS OF
SIGNAL UZ
(SHOWN SEPARATELY)



FUNDAMENTAL
FREQUENCY
612A

THIRD HARMONIC
612B

6.12C
FIFTH HARMONIC:

FIG. 6 (cont)

12-092 80 SWEETS BLUE 8 SQUARE
42-081 80 SWEETS BLUE 8 SQUARE
42-082 100 SWEETS BLUE 8 SQUARE
42-083 200 SWEETS BLUE 8 SQUARE
42-084 100 SWEETS BLUE 8 SQUARE
42-085 200 SWEETS BLUE 8 SQUARE
42-086 100 RECYCLED WHITE 8 SQUARE
42-087 200 RECYCLED WHITE 8 SQUARE
42-088 100 RECYCLED WHITE 8 SQUARE
42-089 200 RECYCLED WHITE 8 SQUARE

Made in U.S.A.

Wanda N. G. A.

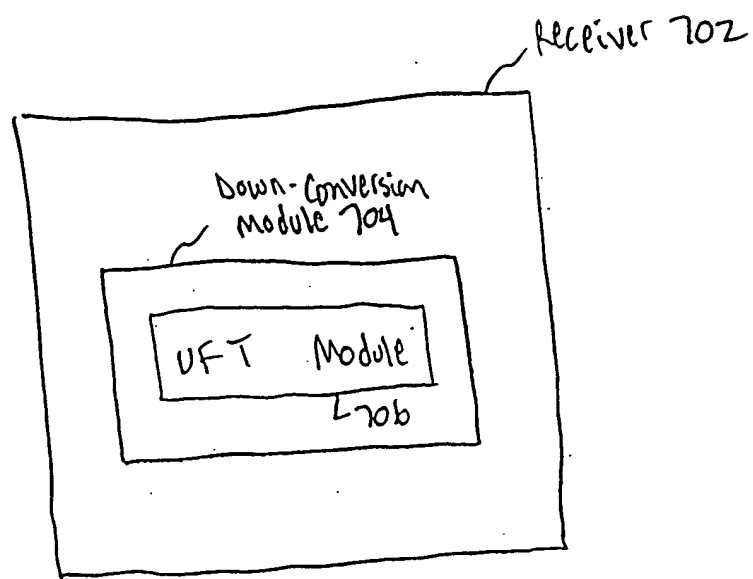
A hand-drawn waveform diagram. The waveform is plotted on a horizontal baseline. It consists of two main sections. The left section, labeled 'b10' below it, shows a series of sharp, narrow peaks and troughs. The right section, labeled 'b12' below it, shows a series of broader, more rounded peaks and troughs. A large horizontal bracket is drawn above the waveform, spanning both the 'b10' and 'b12' sections.

49
513

610c 612c

Fig. 6I

FIG 6 (cont)



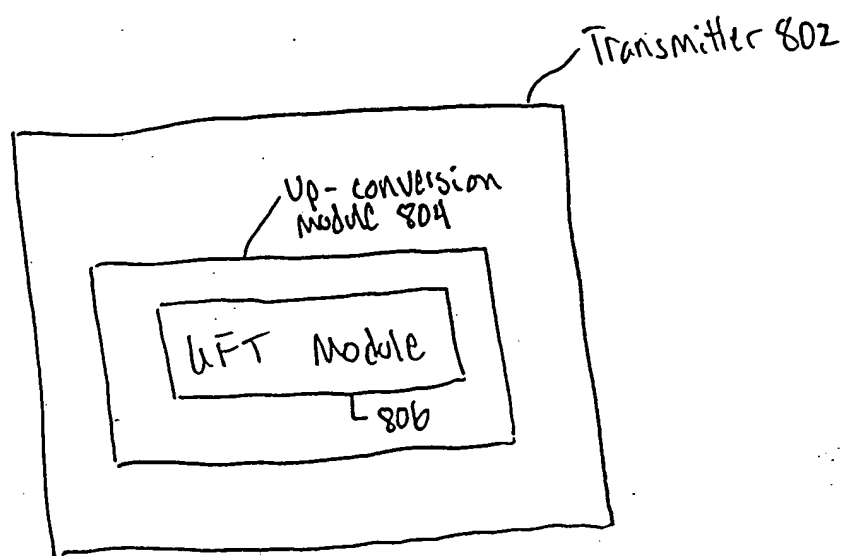


FIG. 8

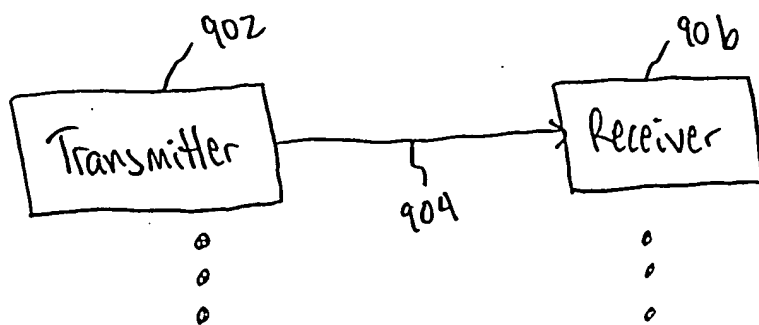


FIG. 9

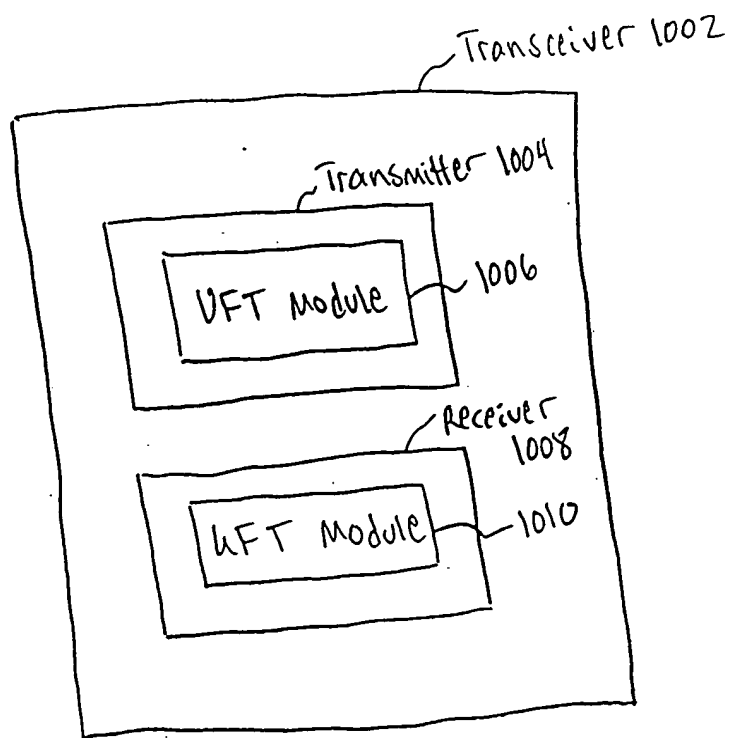


FIG. 10

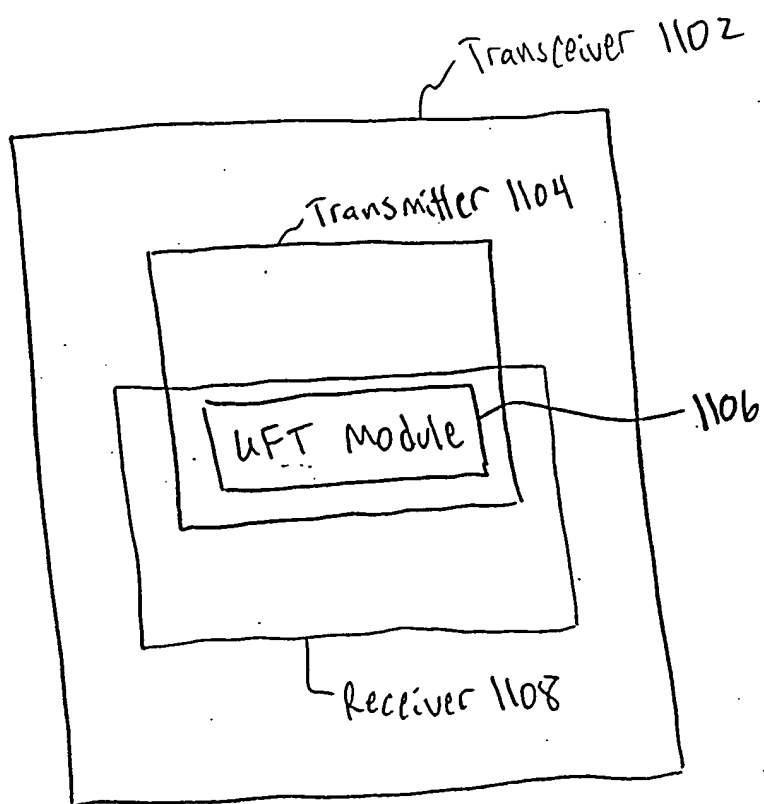


FIG. 11

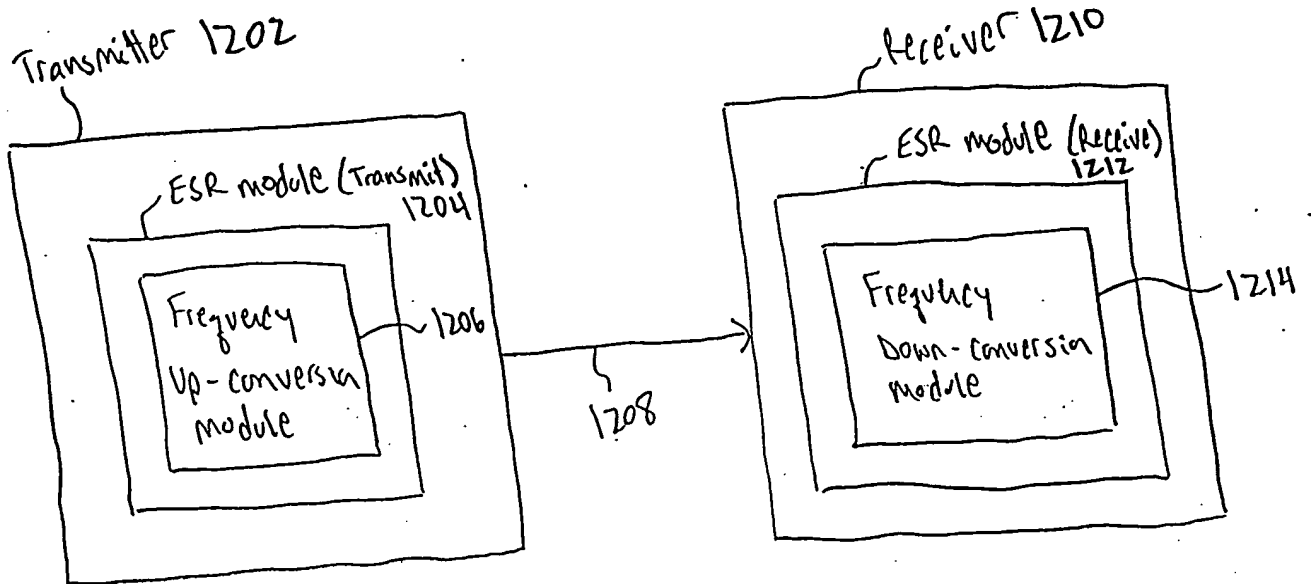


FIG. 12

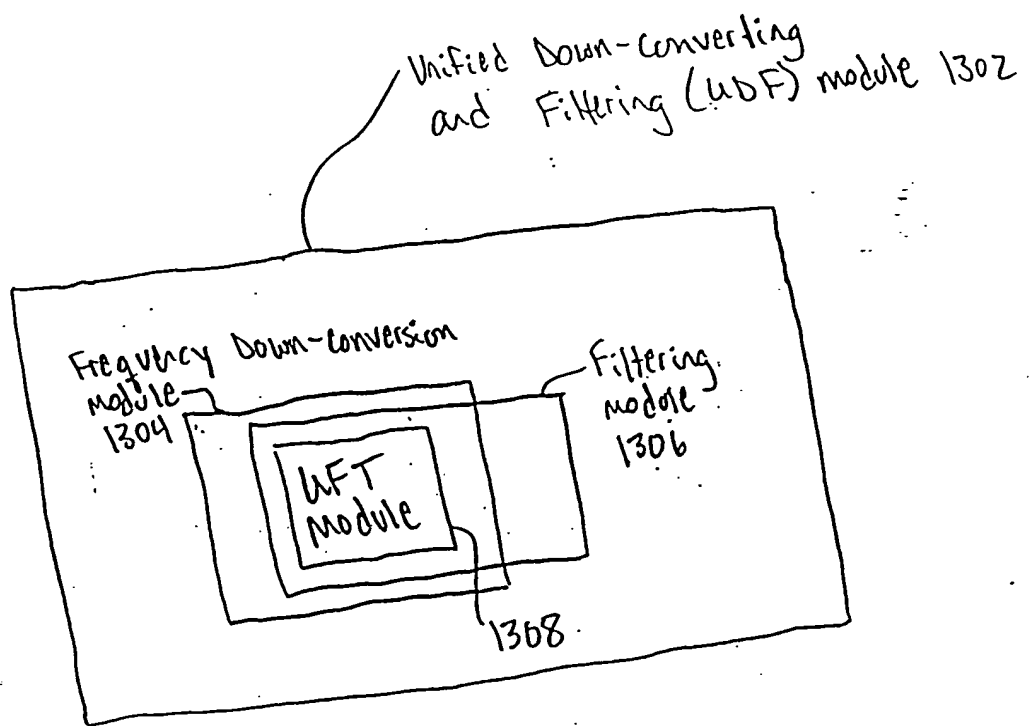


FIG. 13

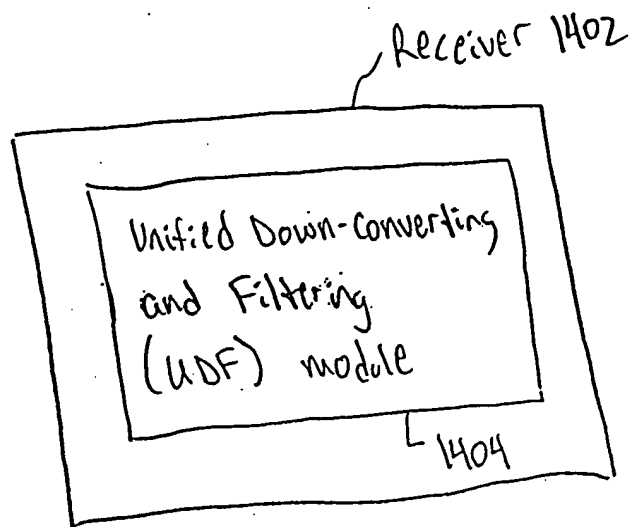


FIG. 14

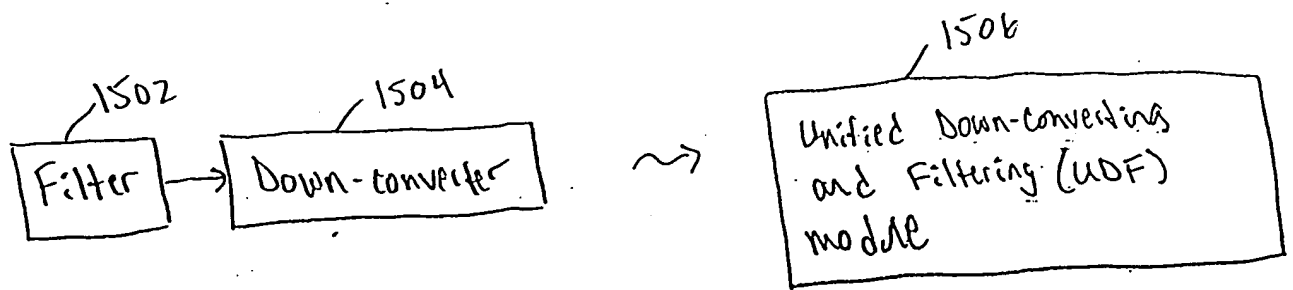


FIG. 15A

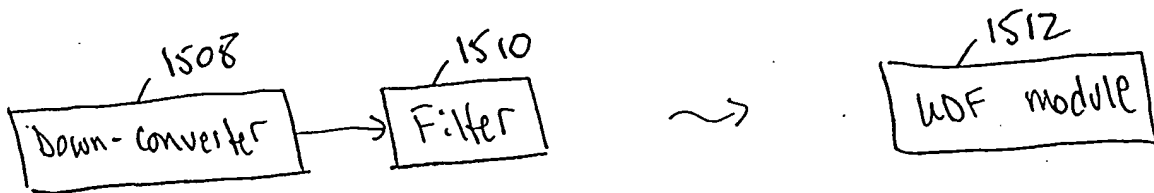


FIG. 15B

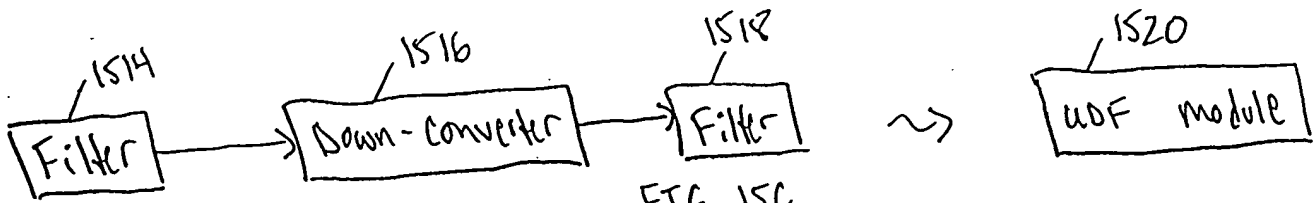


FIG. 15C



FIG. 15D



FIG. 15E



FIG. 15F

2025 RELEASE UNDER E.O. 14176

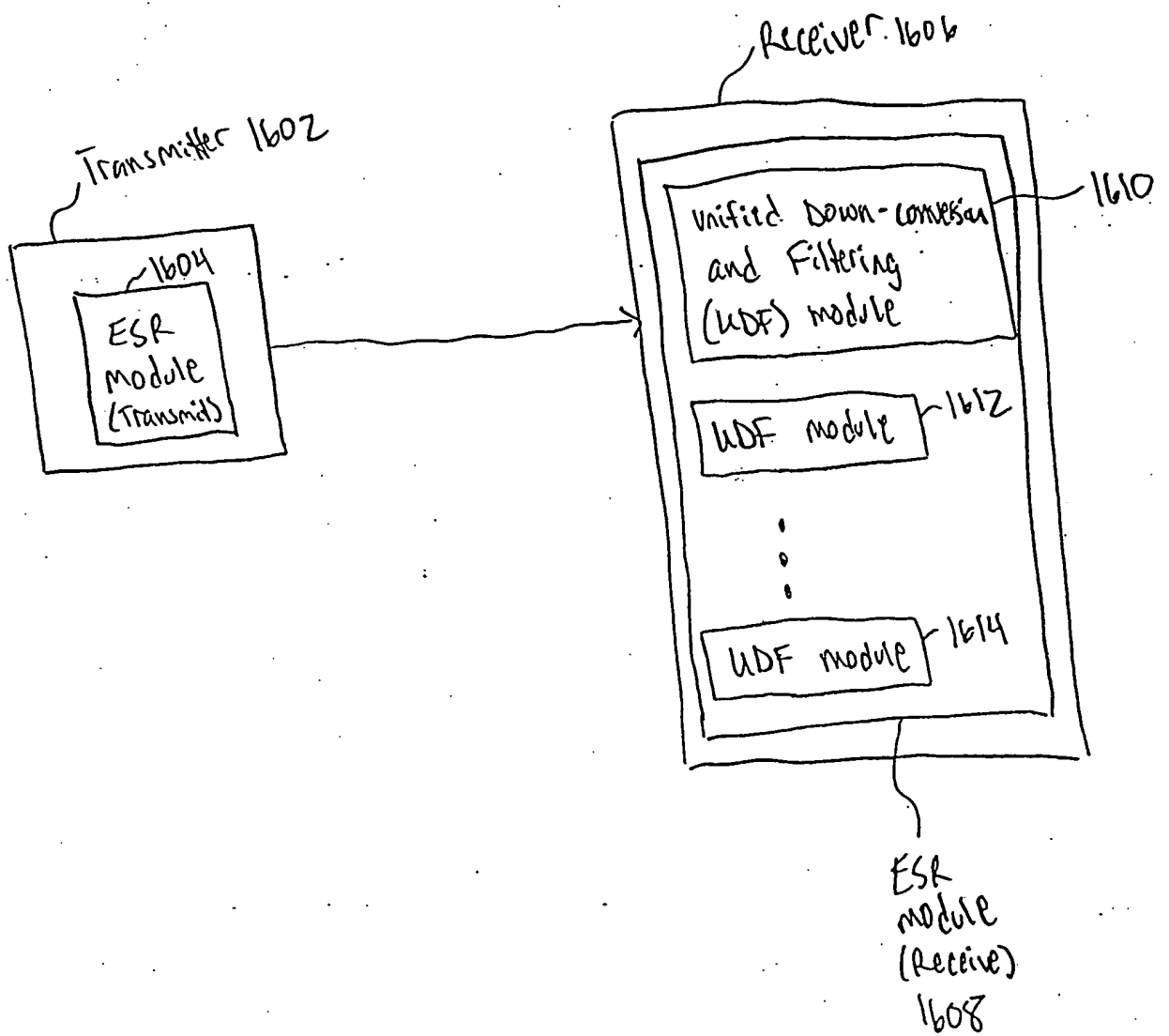


FIG. 16

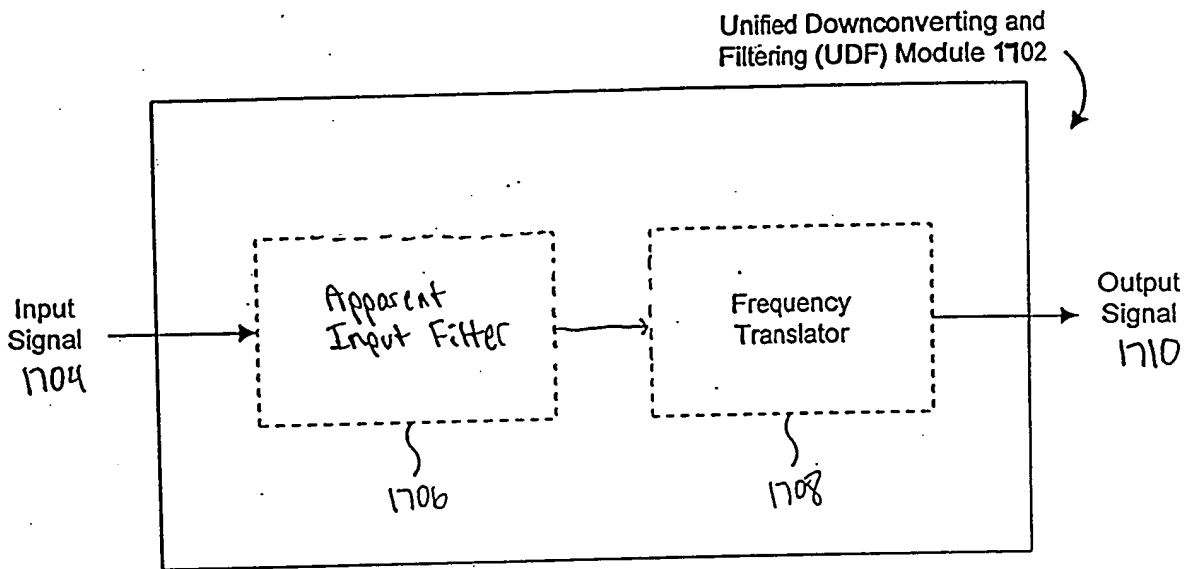


FIG. 17

1802

Time Node	t-1 (rising edge of ϕ_1)	t-1 (rising edge of ϕ_2)	t (rising edge of ϕ_1)	t (rising edge of ϕ_2)	t+1 (rising edge of ϕ_1)
1402	VI_{t-1} <u>1804</u>	VI_{t-1} <u>1808</u>	VI_t <u>1816</u>	VI_t <u>1826</u>	VI_{t+1} <u>1838</u>
1404	—	VI_{t-1} <u>1810</u>	VI_{t-1} <u>1818</u>	VI_t <u>1828</u>	VI_t <u>1840</u>
1406	VO_{t-1} <u>1806</u>	VO_{t-1} <u>1812</u>	VO_t <u>1820</u>	VO_t <u>1830</u>	VO_{t+1} <u>1842</u>
1408	—	VO_{t-1} <u>1814</u>	VO_{t-1} <u>1822</u>	VO_t <u>1832</u>	VO_t <u>1844</u>
1410	— <u>1807</u>	—	VO_{t-1} <u>1824</u>	VO_{t-1} <u>1834</u>	VO_t <u>1846</u>
1412	—	— <u>1815</u>	—	VO_{t-1} <u>1836</u>	VO_{t-1} <u>1848</u>
1418	—	—	—	—	$VI_t -$ <u>1850</u> $0.1 * VO_t -$ $0.8 * VO_{t-1}$

FIG. 18

van nobile 1972

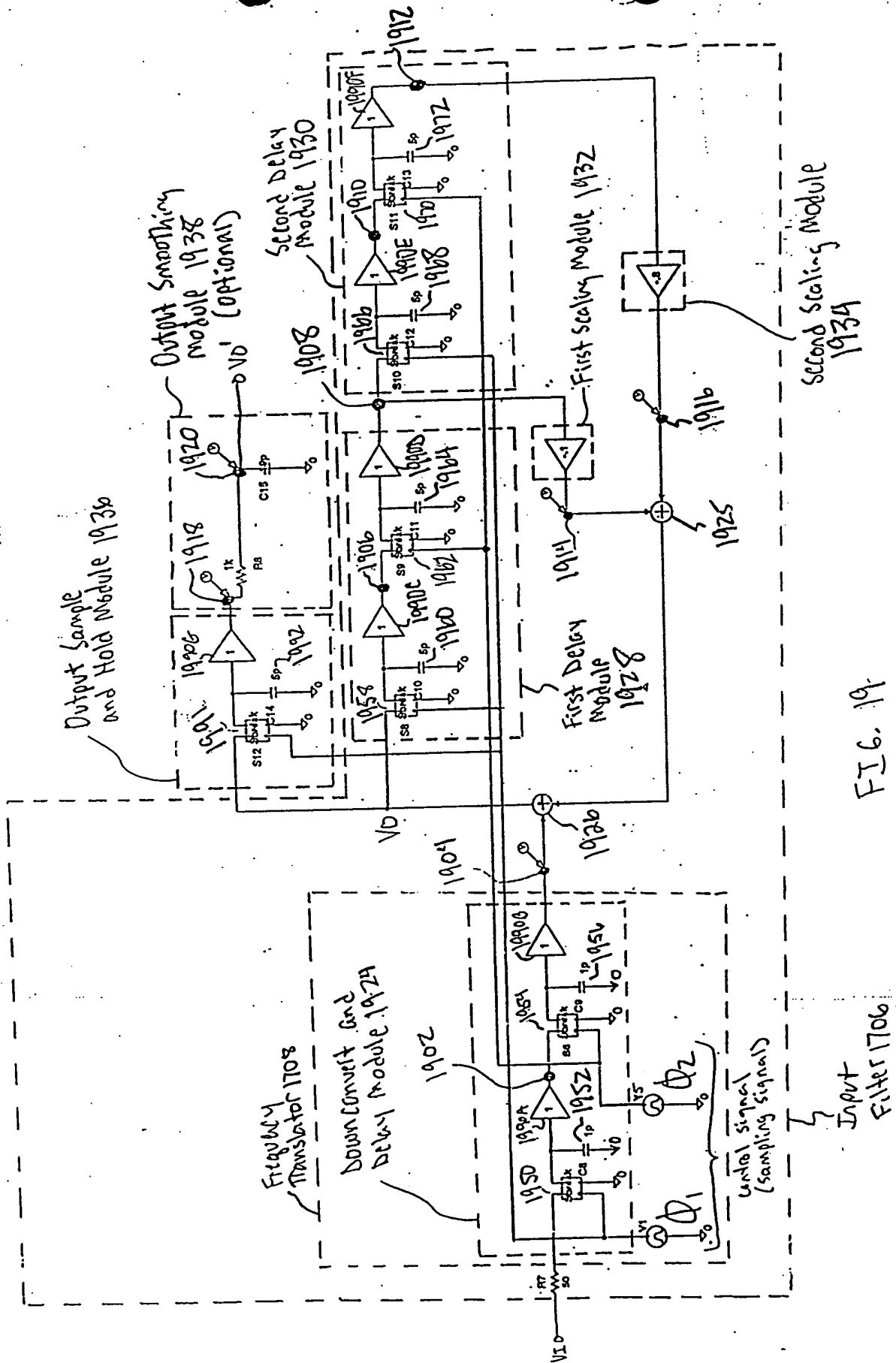


FIG. 19.

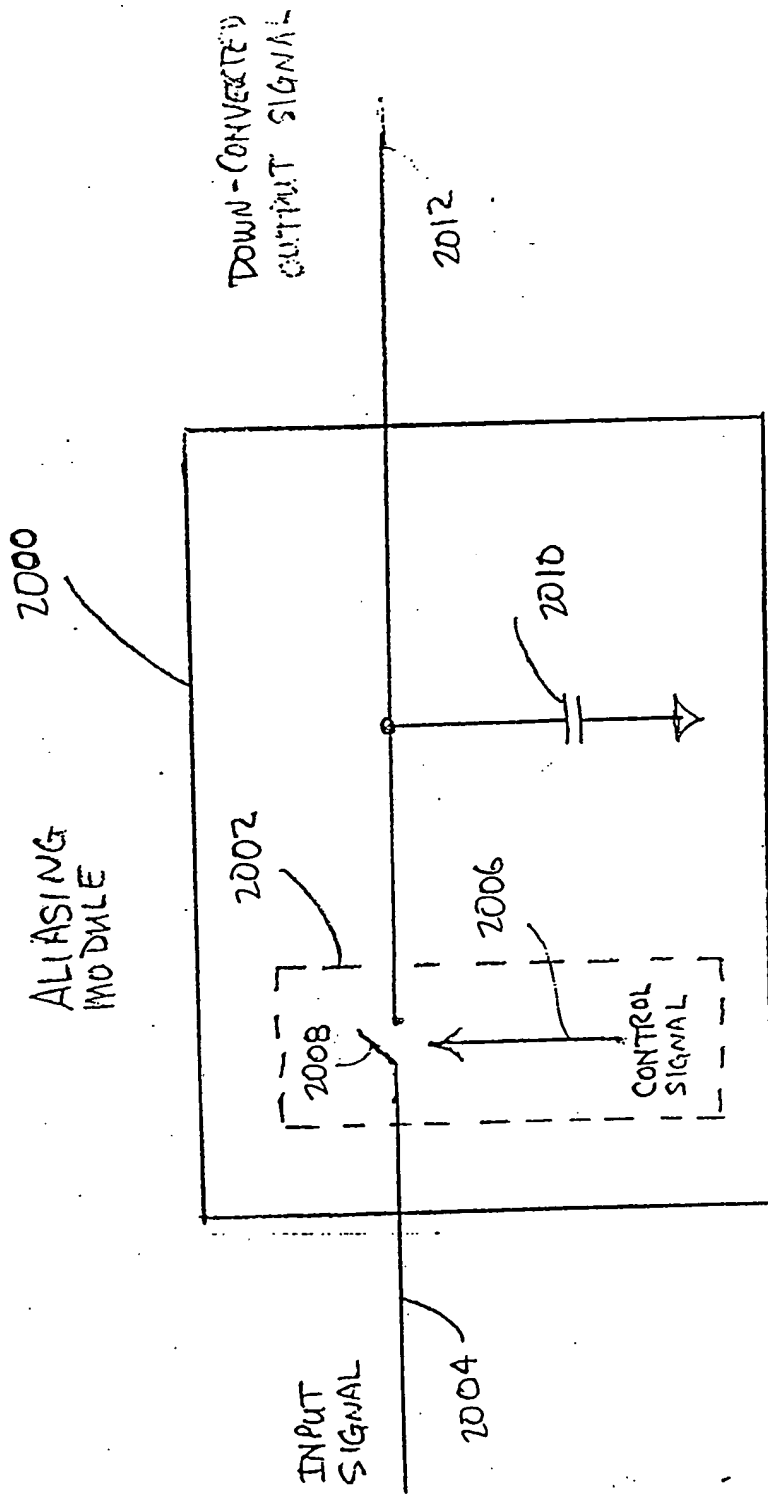


FIG. 20A

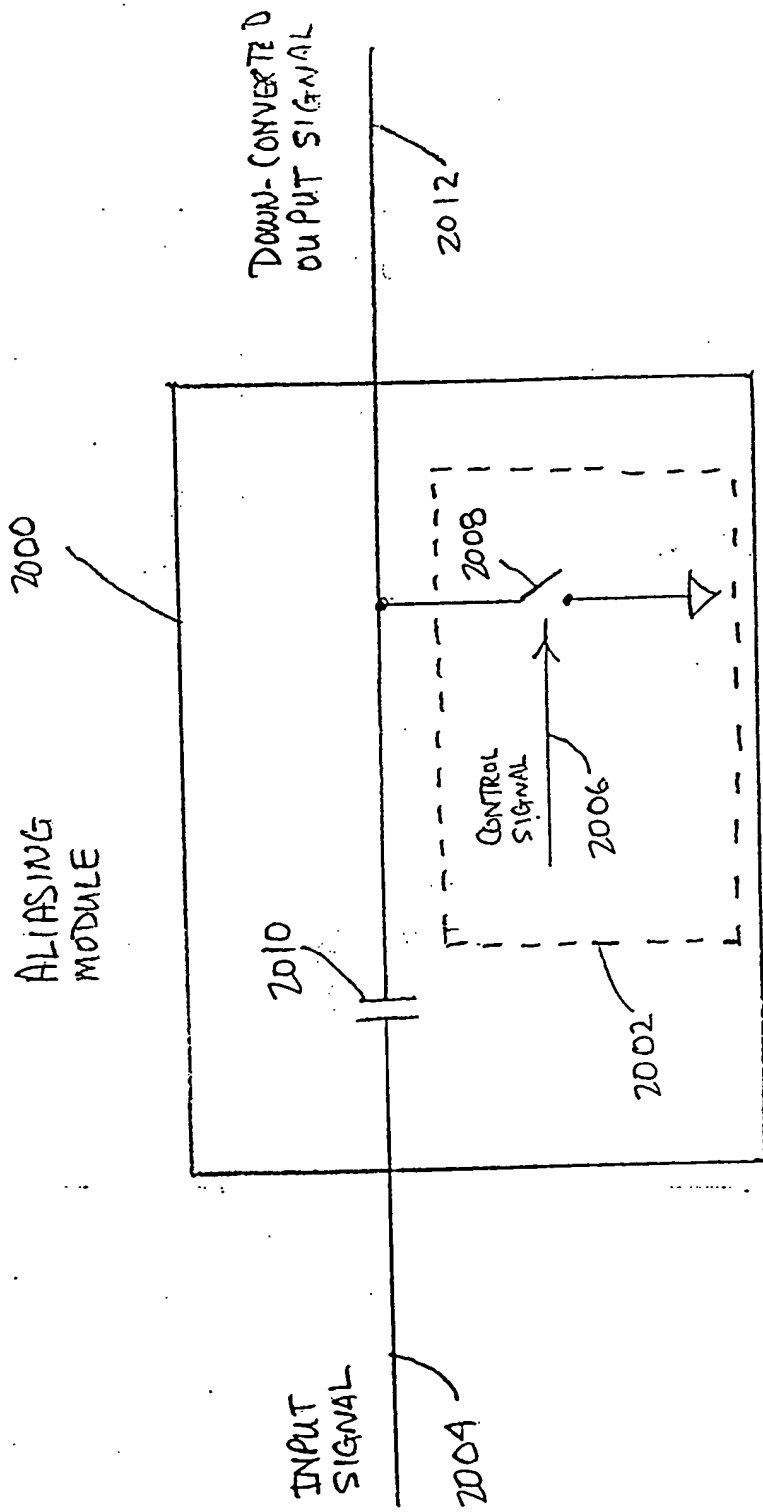


FIG. 20A-1

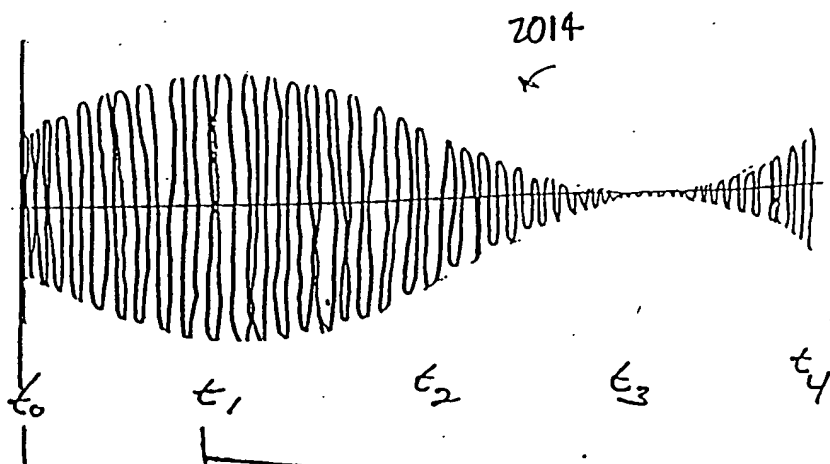


FIG. 20B

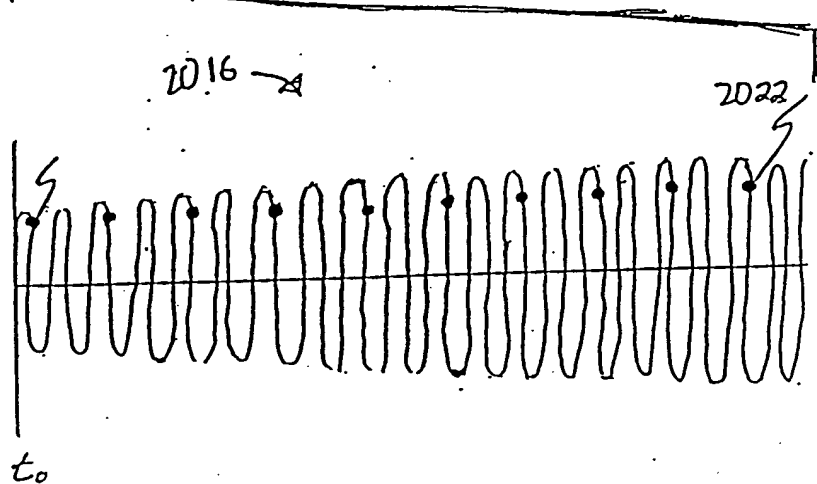


FIG. 20C

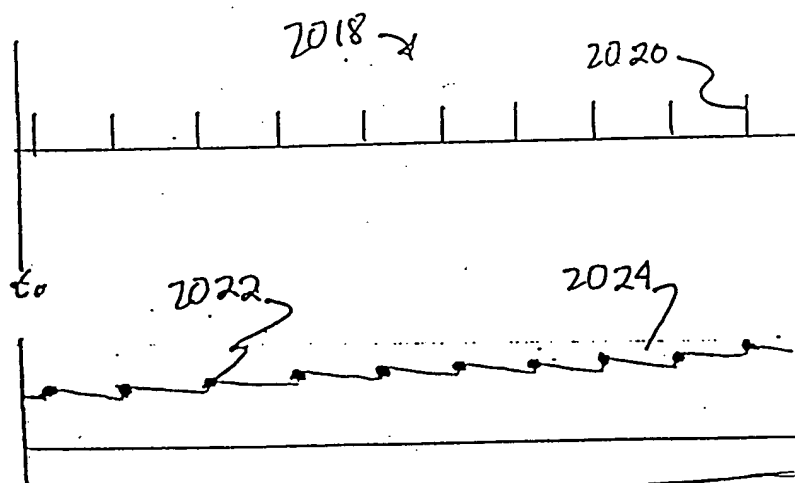


FIG. 20D

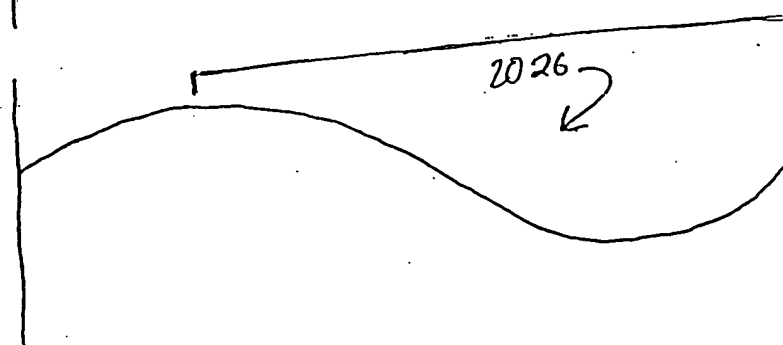


FIG. 20E

FIG. 20F

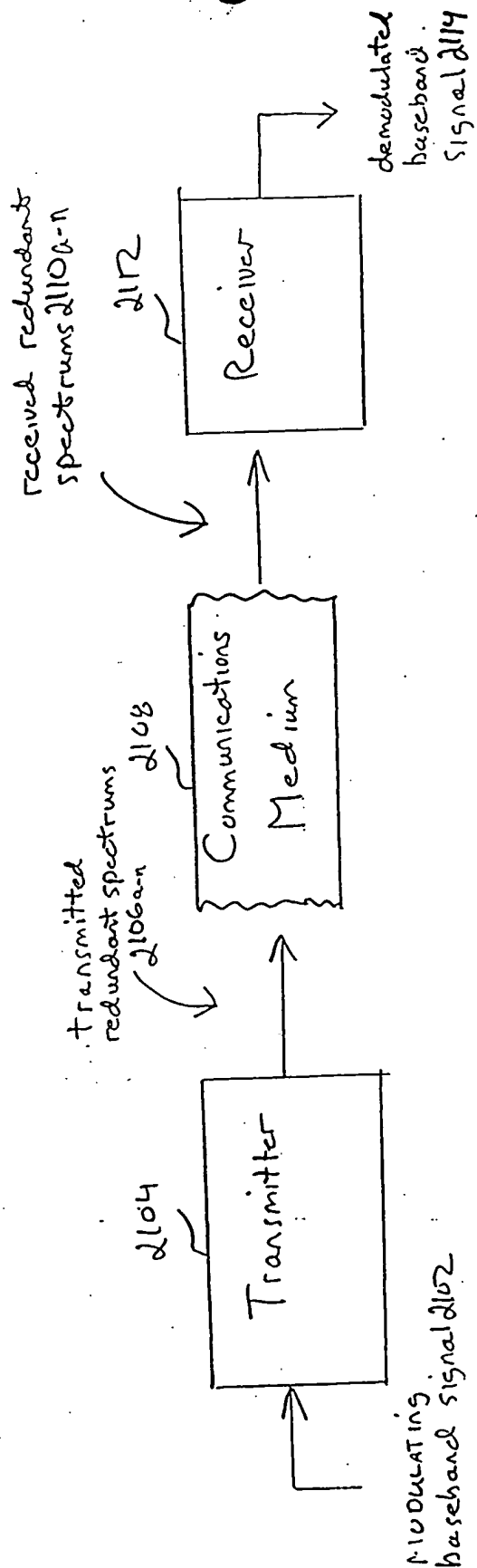
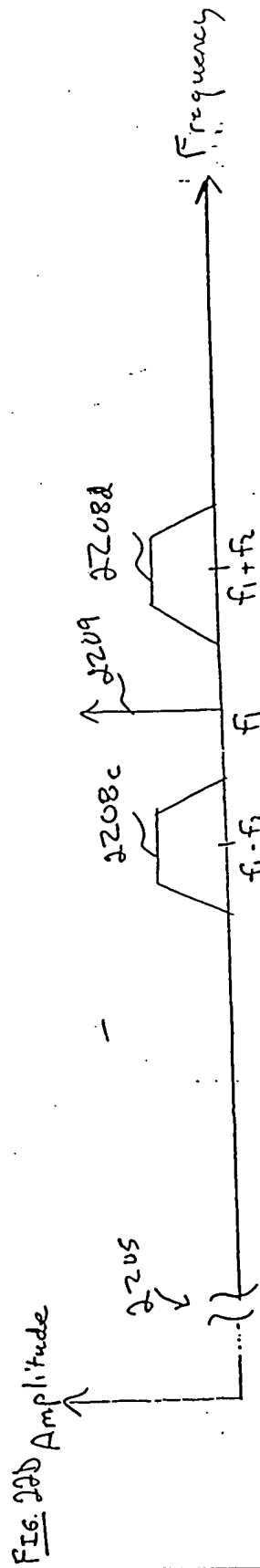
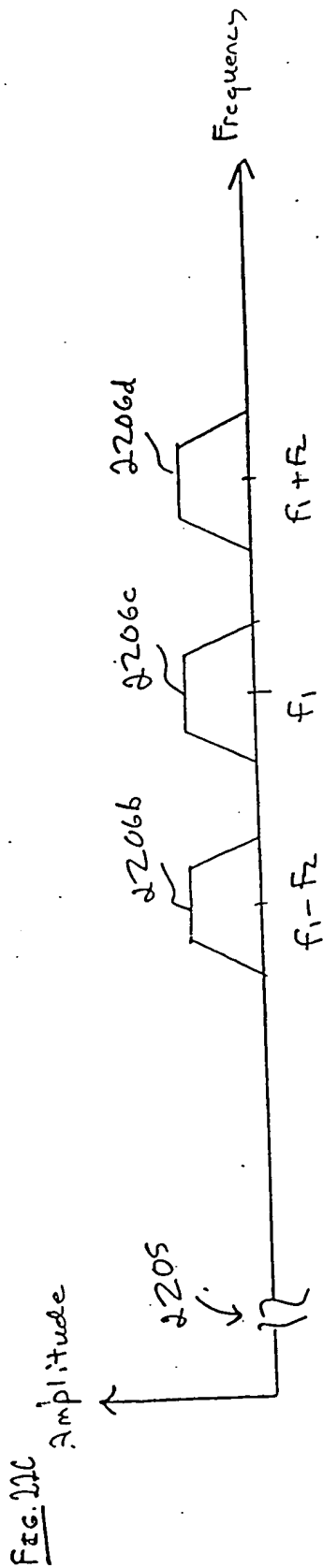
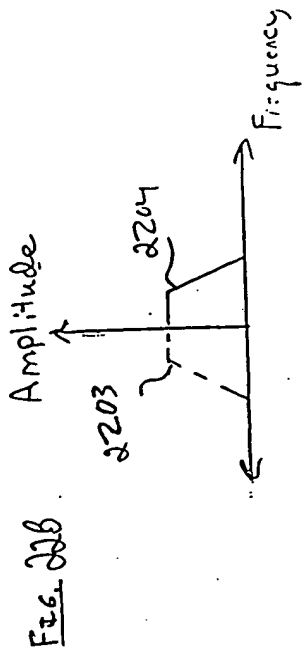
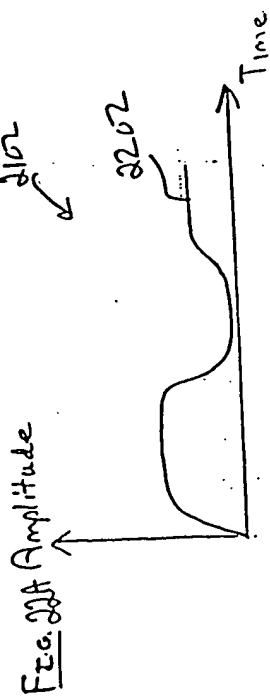
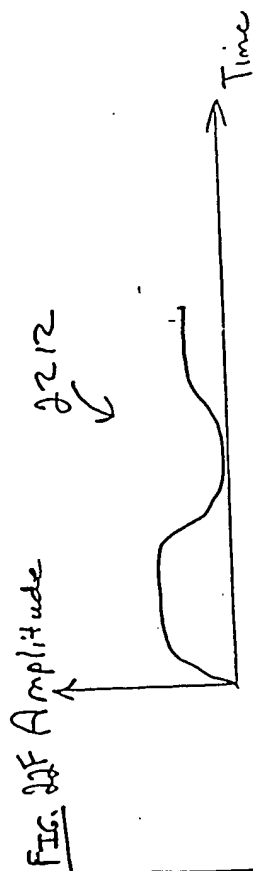
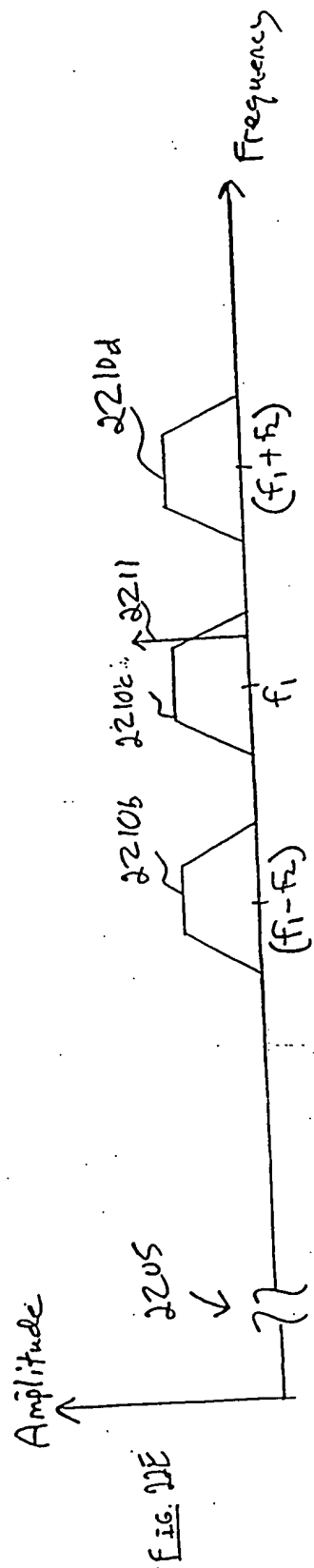


Fig. 21





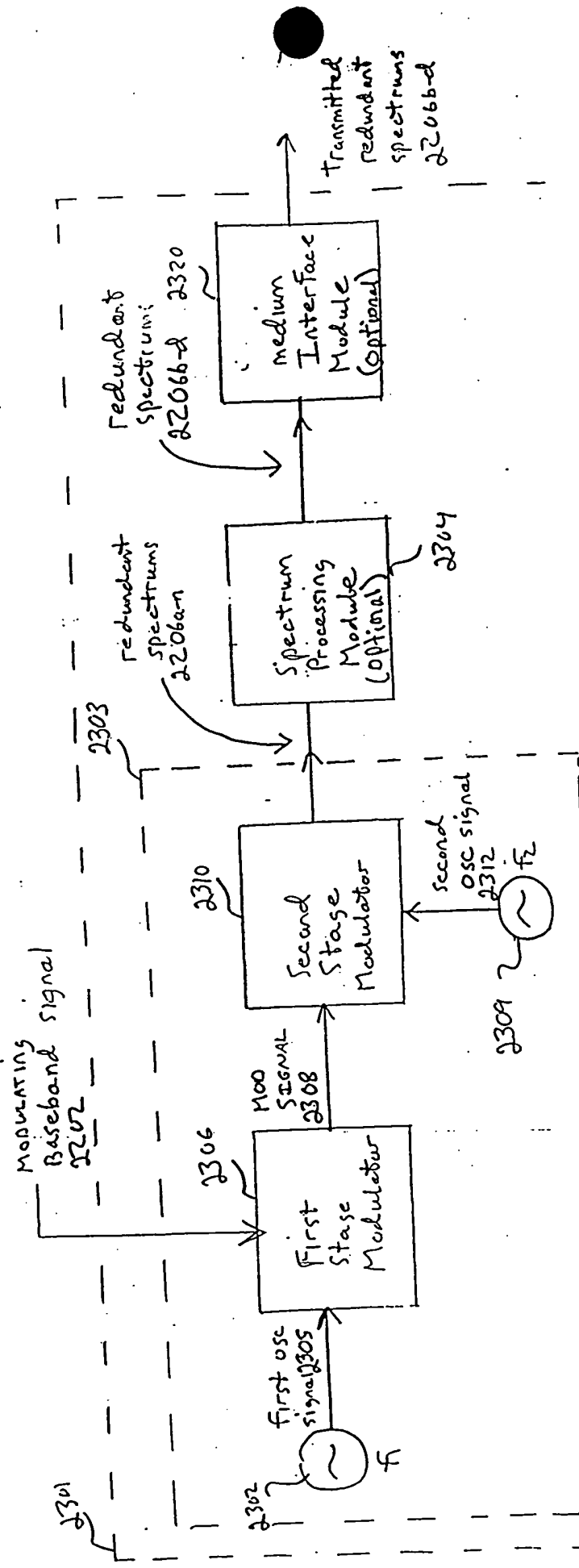
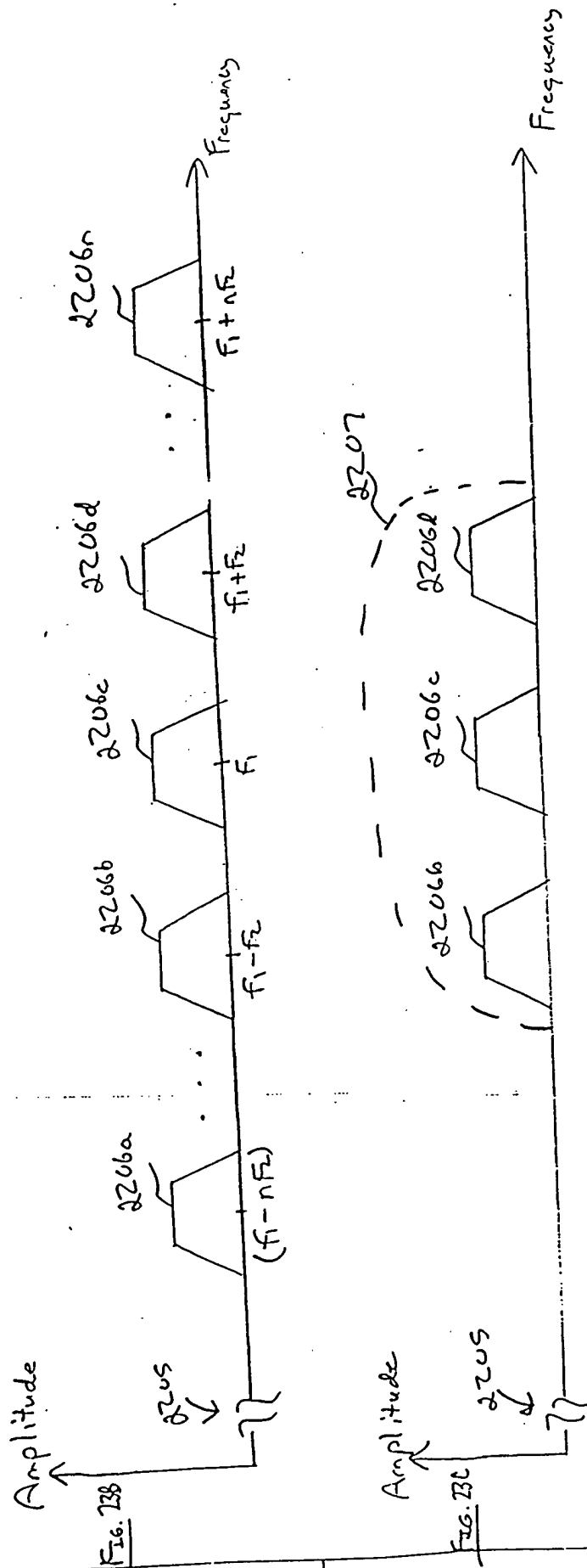


FIG. 23A



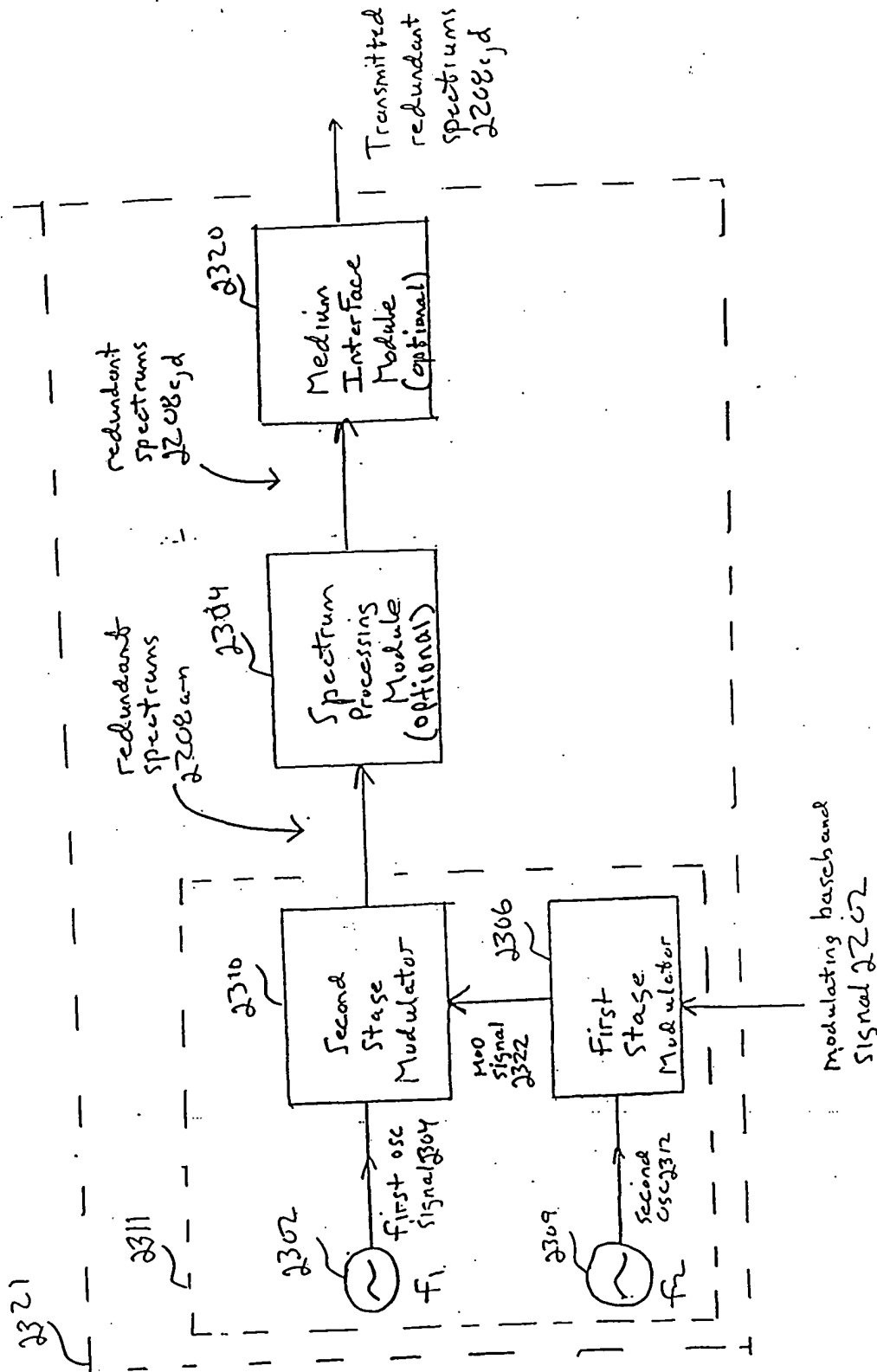


FIG. 23D

FIG. 23E

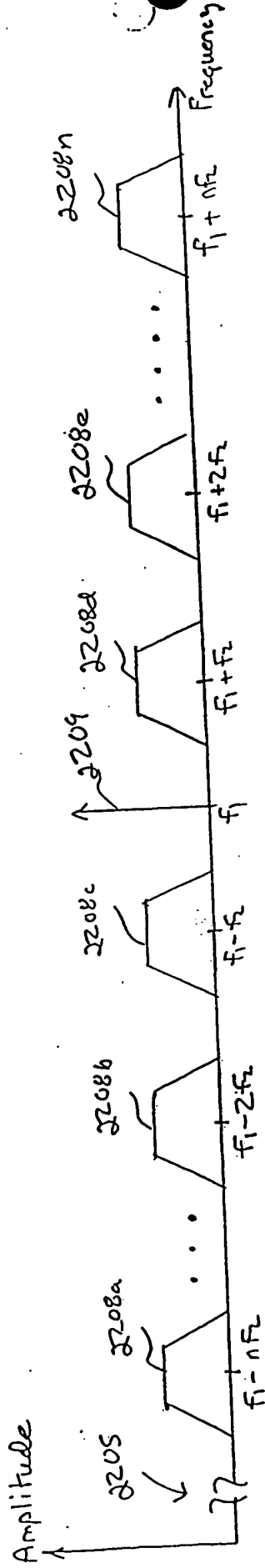
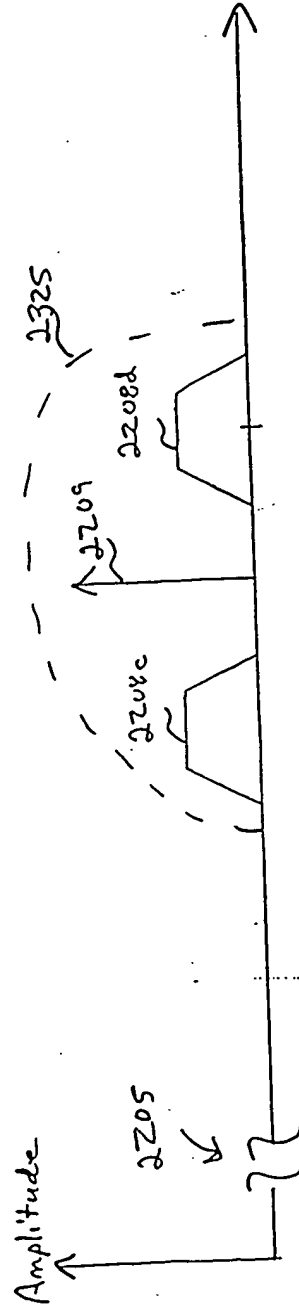


FIG. 23F



2472

2472

2474

2408

2414

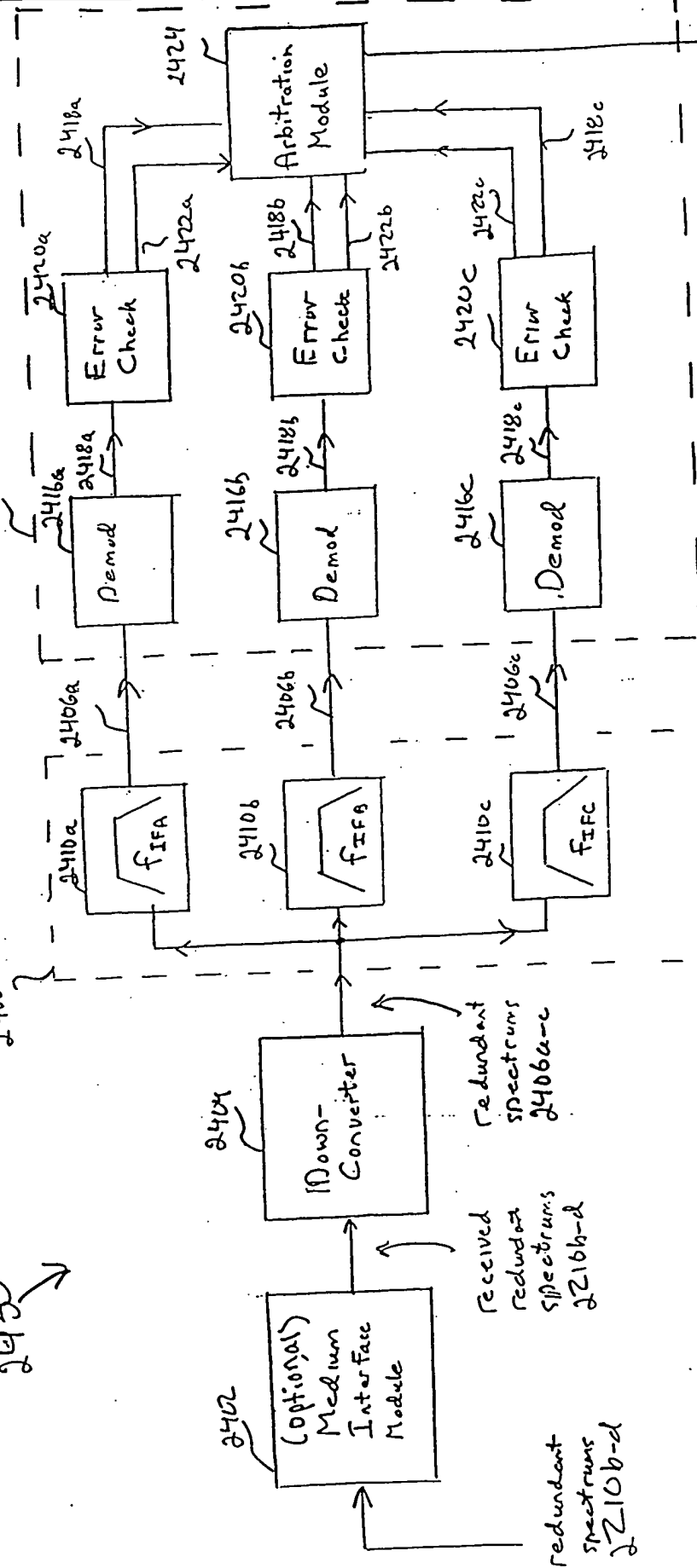
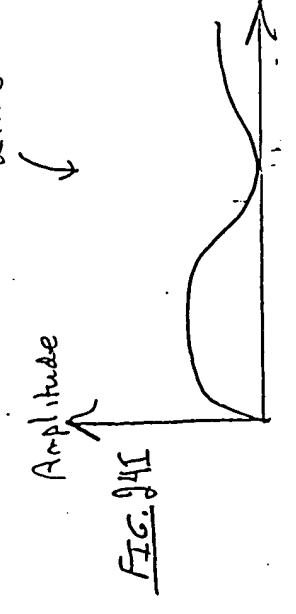
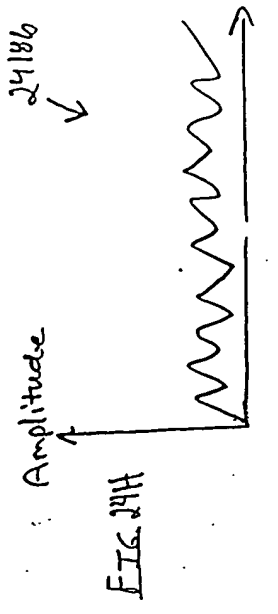
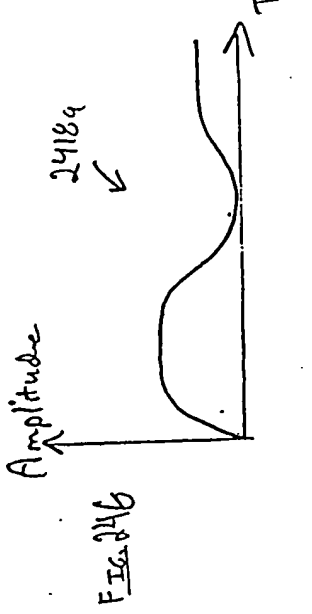
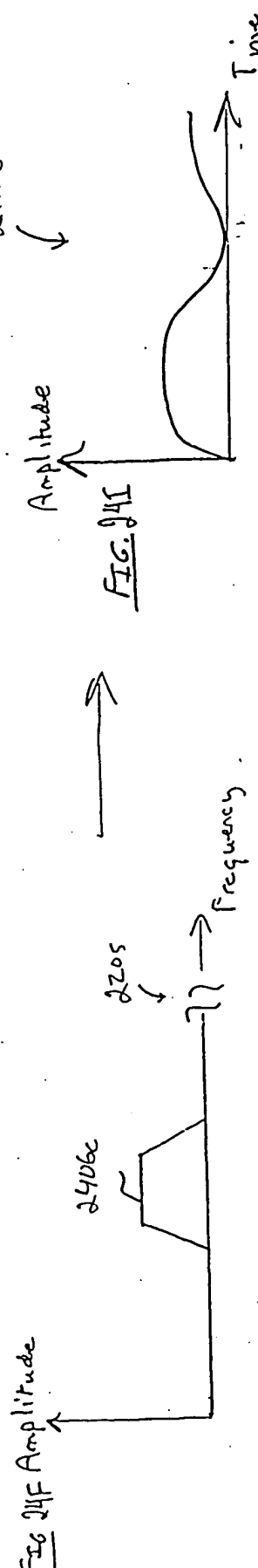
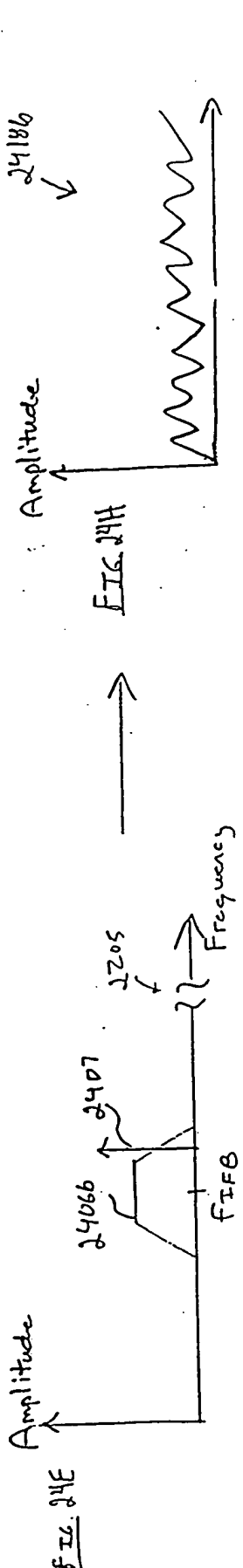
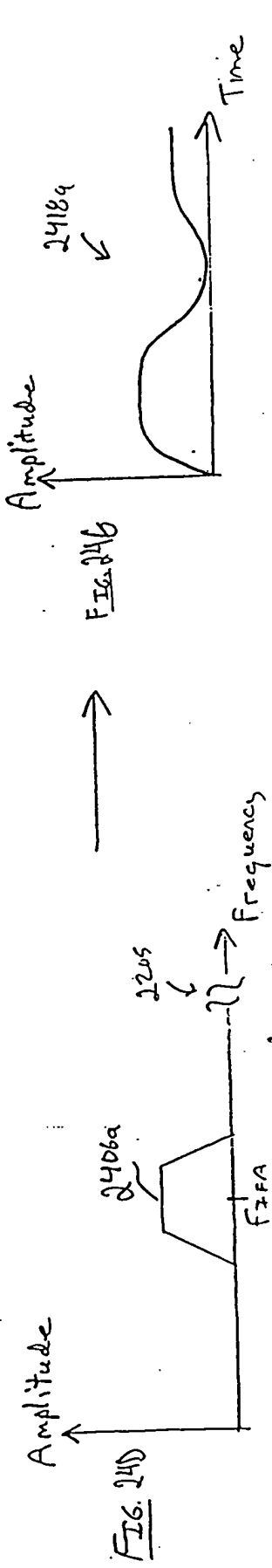


FIG. 24A

43-391 RECYCLED PAPER
 43-392 RECYCLED PAPER
 43-393 RECYCLED PAPER
 43-394 RECYCLED PAPER
 43-395 RECYCLED PAPER
 43-396 RECYCLED PAPER
 43-397 RECYCLED PAPER
 43-398 RECYCLED PAPER
 43-399 RECYCLED PAPER
 43-400 RECYCLED PAPER



43-391 RECYCLED PAPER
 43-392 RECYCLED PAPER
 43-393 RECYCLED PAPER
 43-394 RECYCLED PAPER
 43-395 RECYCLED PAPER
 43-396 RECYCLED PAPER
 43-397 RECYCLED PAPER
 43-398 RECYCLED PAPER
 43-399 RECYCLED PAPER
 43-400 RECYCLED PAPER



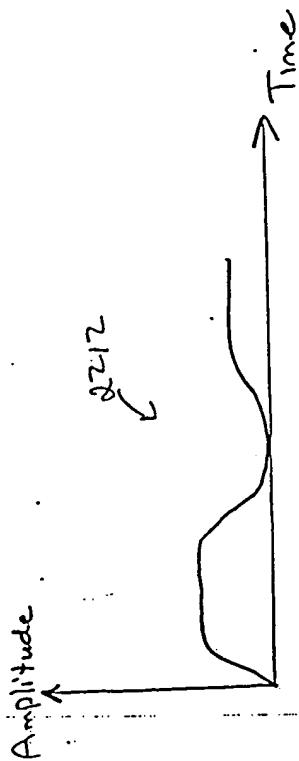


FIG. 245

43381 100% RECYCLED PAPER
43382 100% RECYCLED PAPER
43383 100% RECYCLED PAPER
43384 100% RECYCLED PAPER
43385 100% RECYCLED PAPER
43386 100% RECYCLED PAPER
43387 100% RECYCLED PAPER
43388 100% RECYCLED PAPER
43389 100% RECYCLED PAPER
43390 100% RECYCLED PAPER
43391 100% RECYCLED PAPER
43392 100% RECYCLED PAPER
43393 100% RECYCLED PAPER
43394 100% RECYCLED PAPER
43395 100% RECYCLED PAPER
43396 100% RECYCLED PAPER
43397 100% RECYCLED PAPER
43398 100% RECYCLED PAPER
43399 100% RECYCLED PAPER
43400 100% RECYCLED PAPER

National Brand

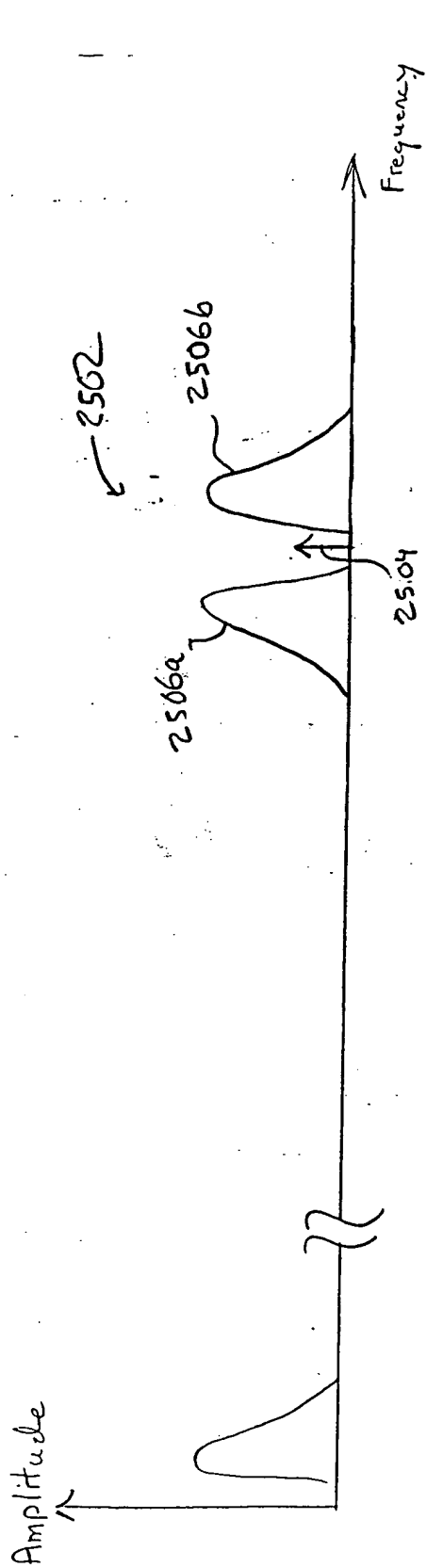
[illegible]

Fig. 25A

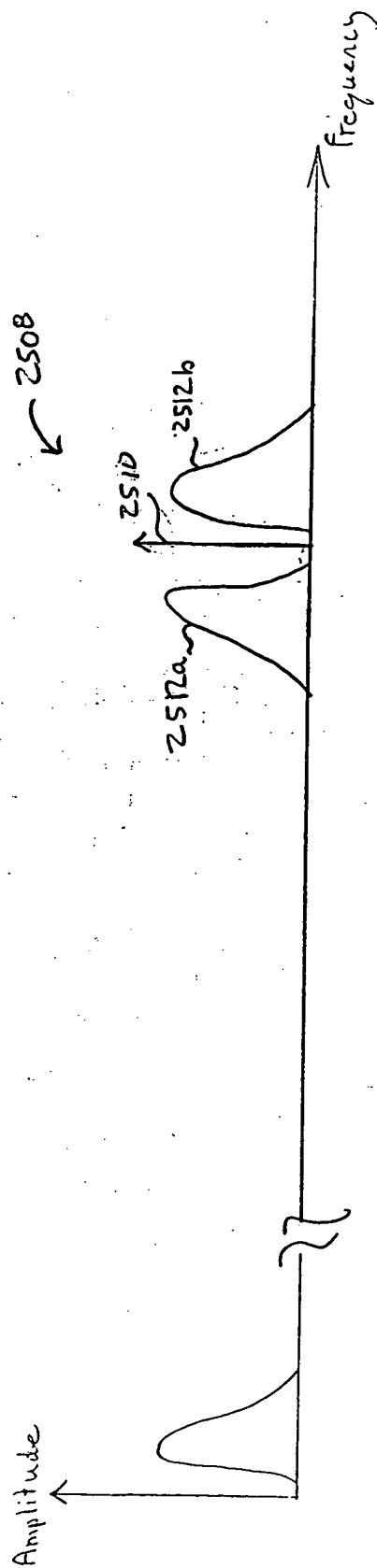


Fig. 25B

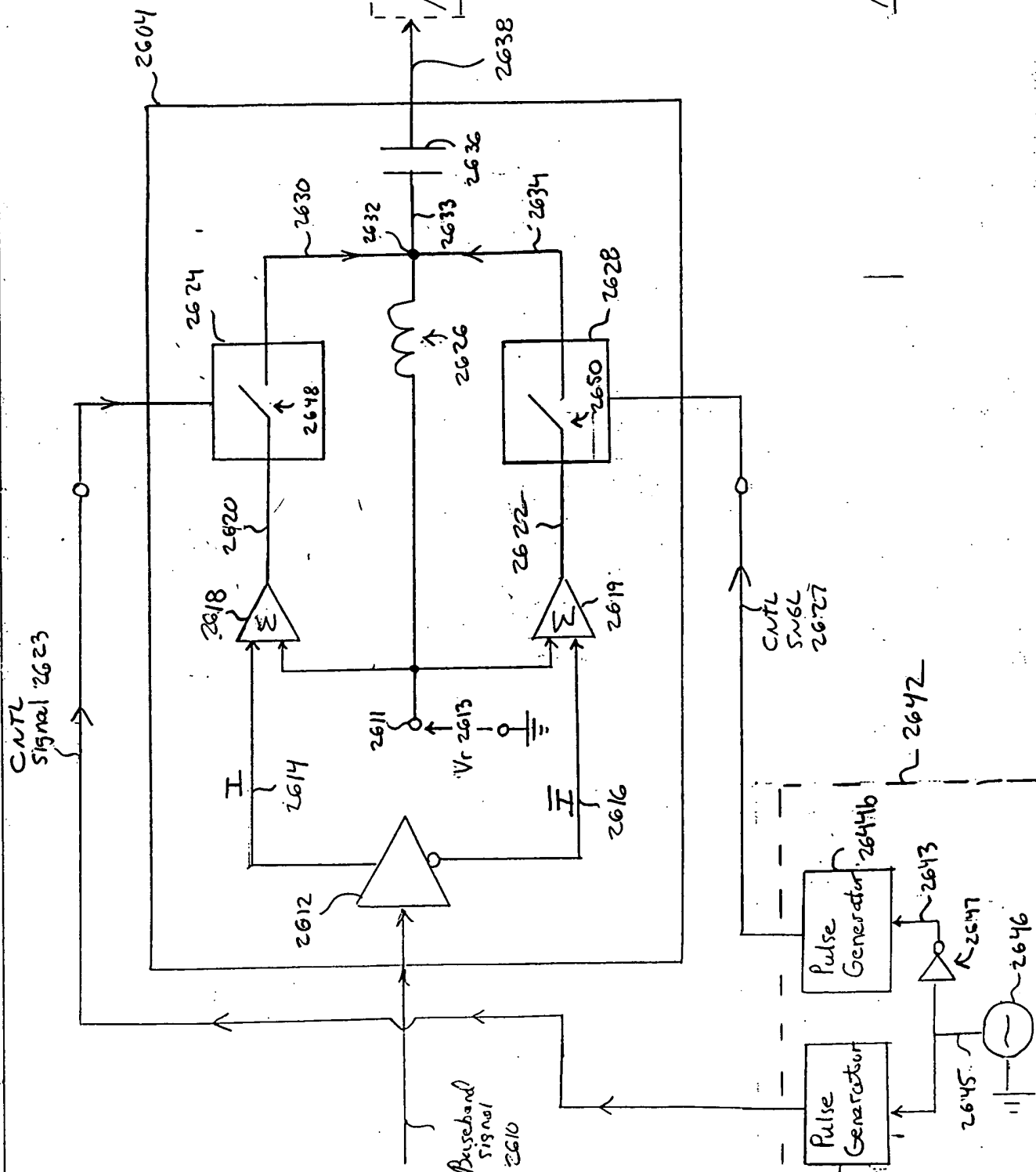


FIG. 26A

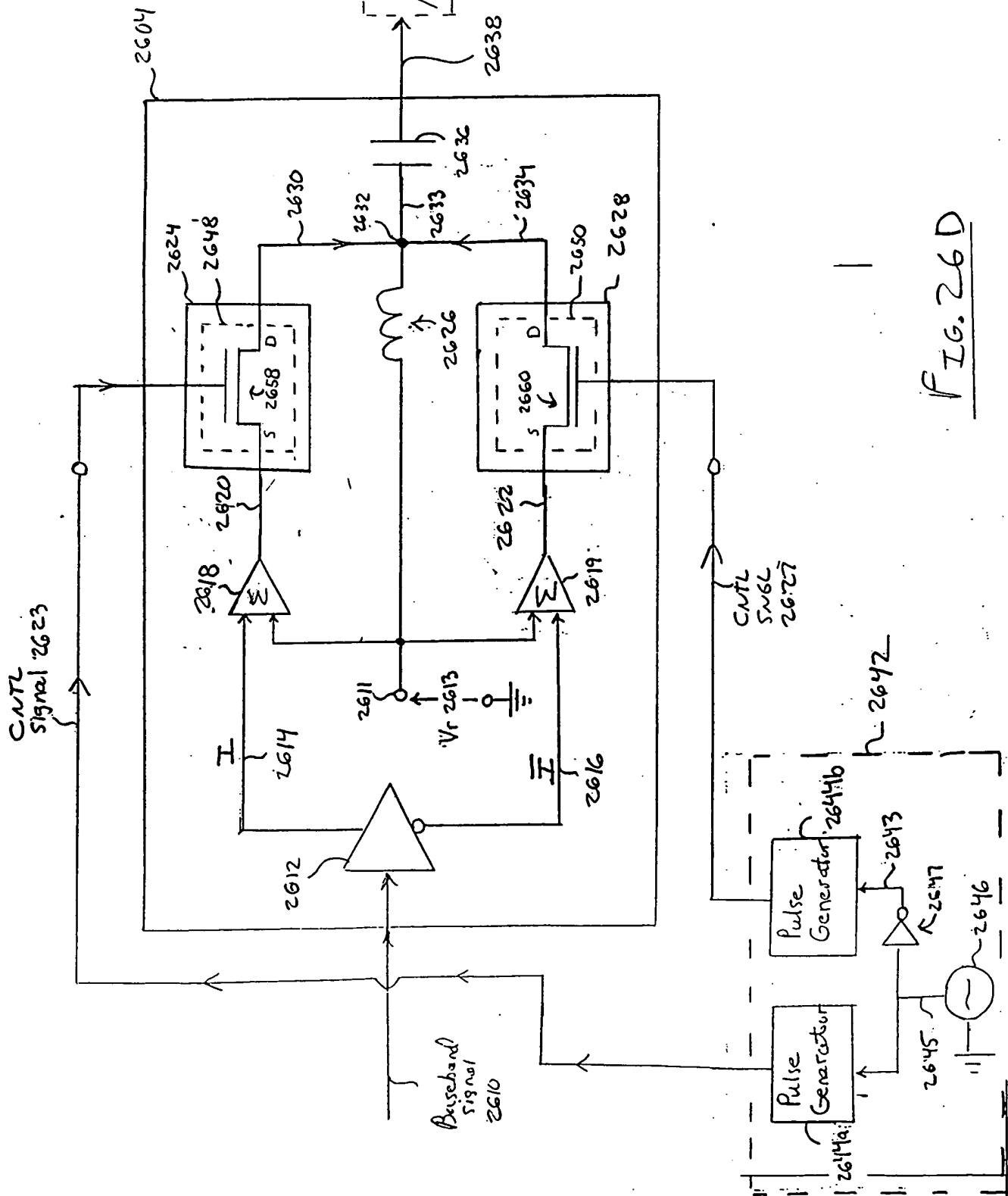


FIG. 26D

FIG. 27A

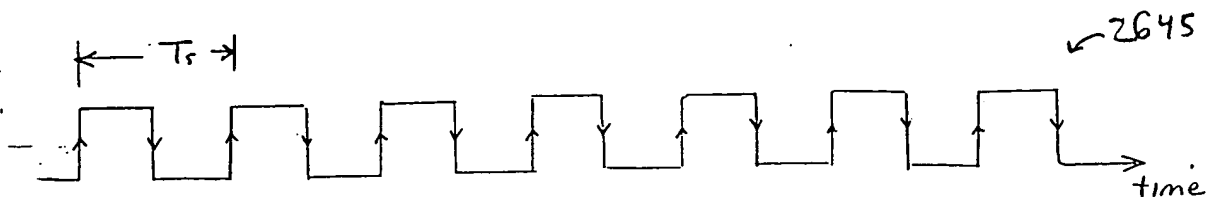


FIG. 27B

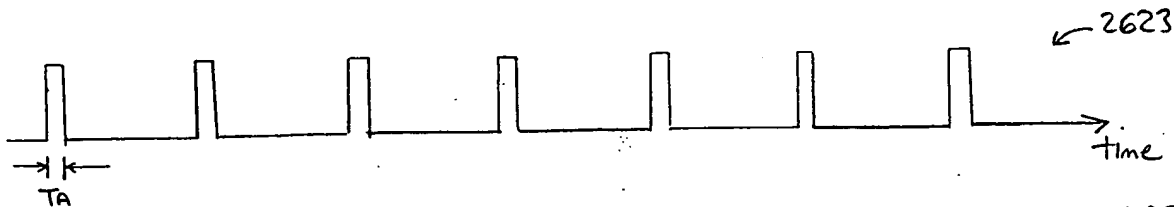


FIG. 27C



FIG. 27D

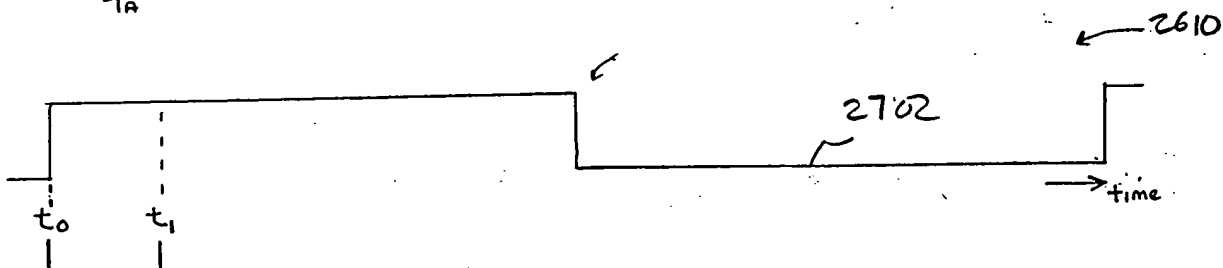


FIG. 27E

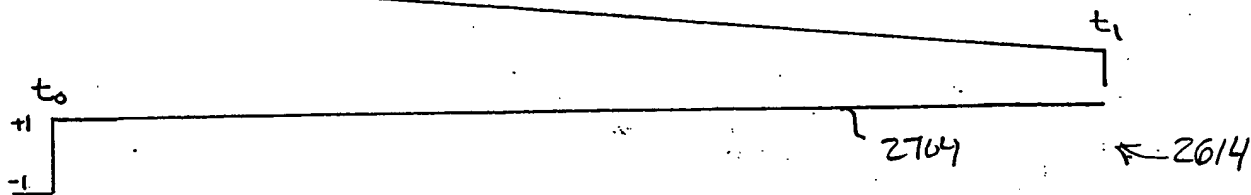


FIG. 27F

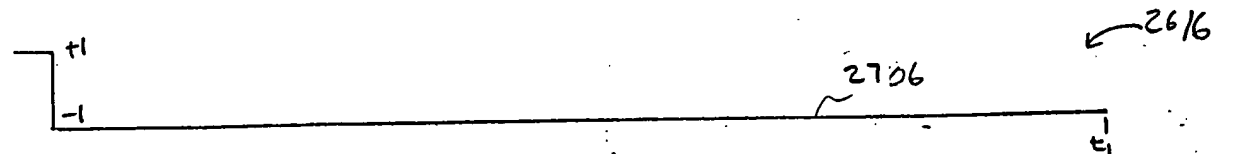


FIG. 27G



FIG. 27H

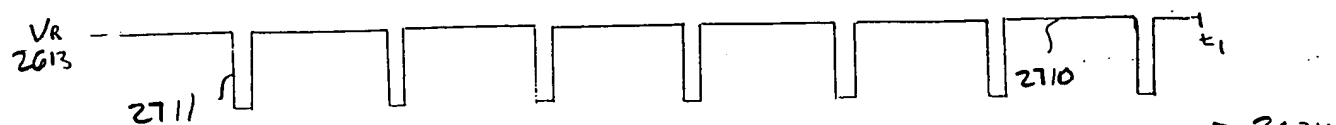
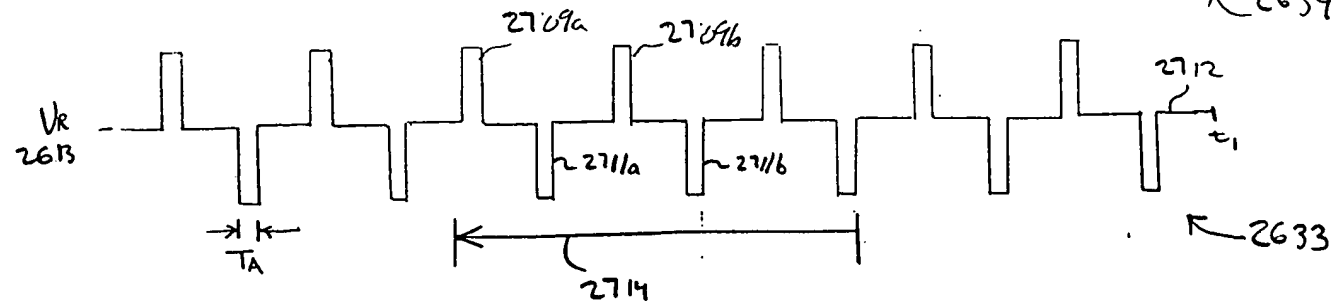


FIG. 27I



Aperture = 500ps
 Fundamental Clock = 200Mhz (5th Subharmonic)
 Square Wave Frequency = 200Mhz

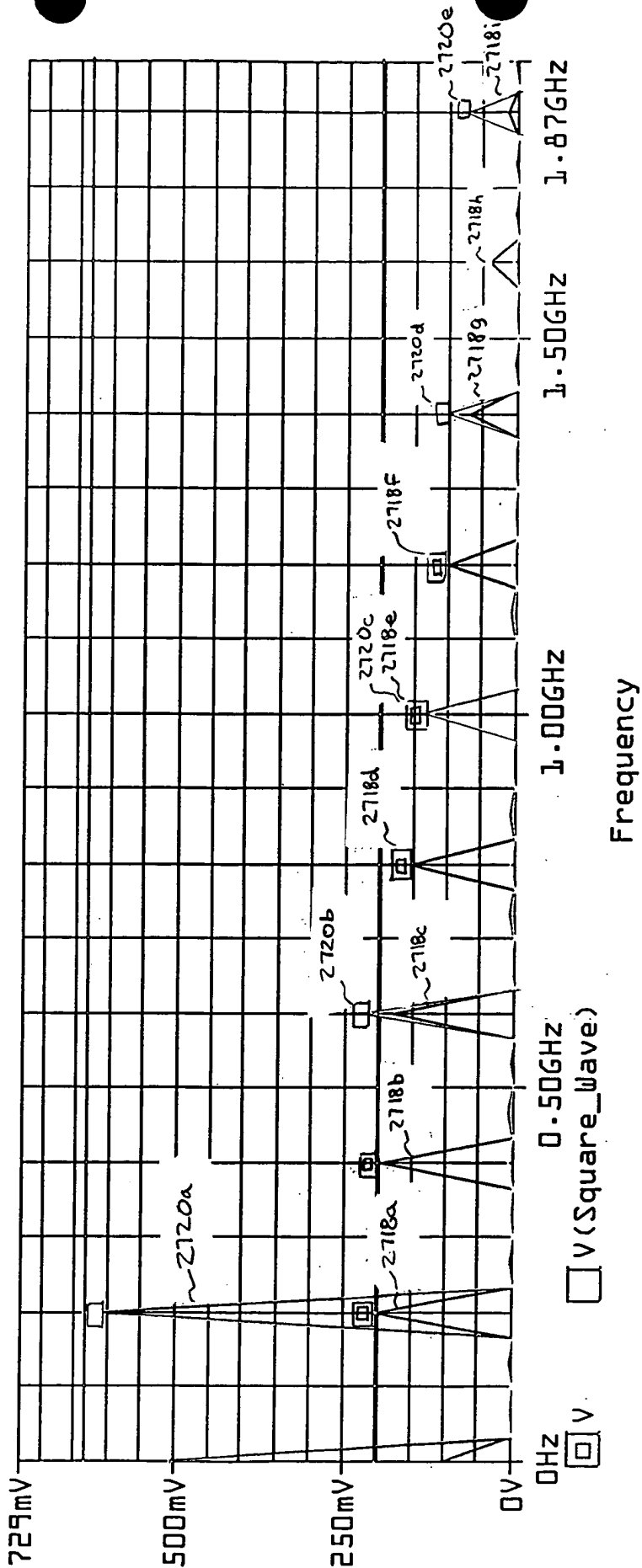
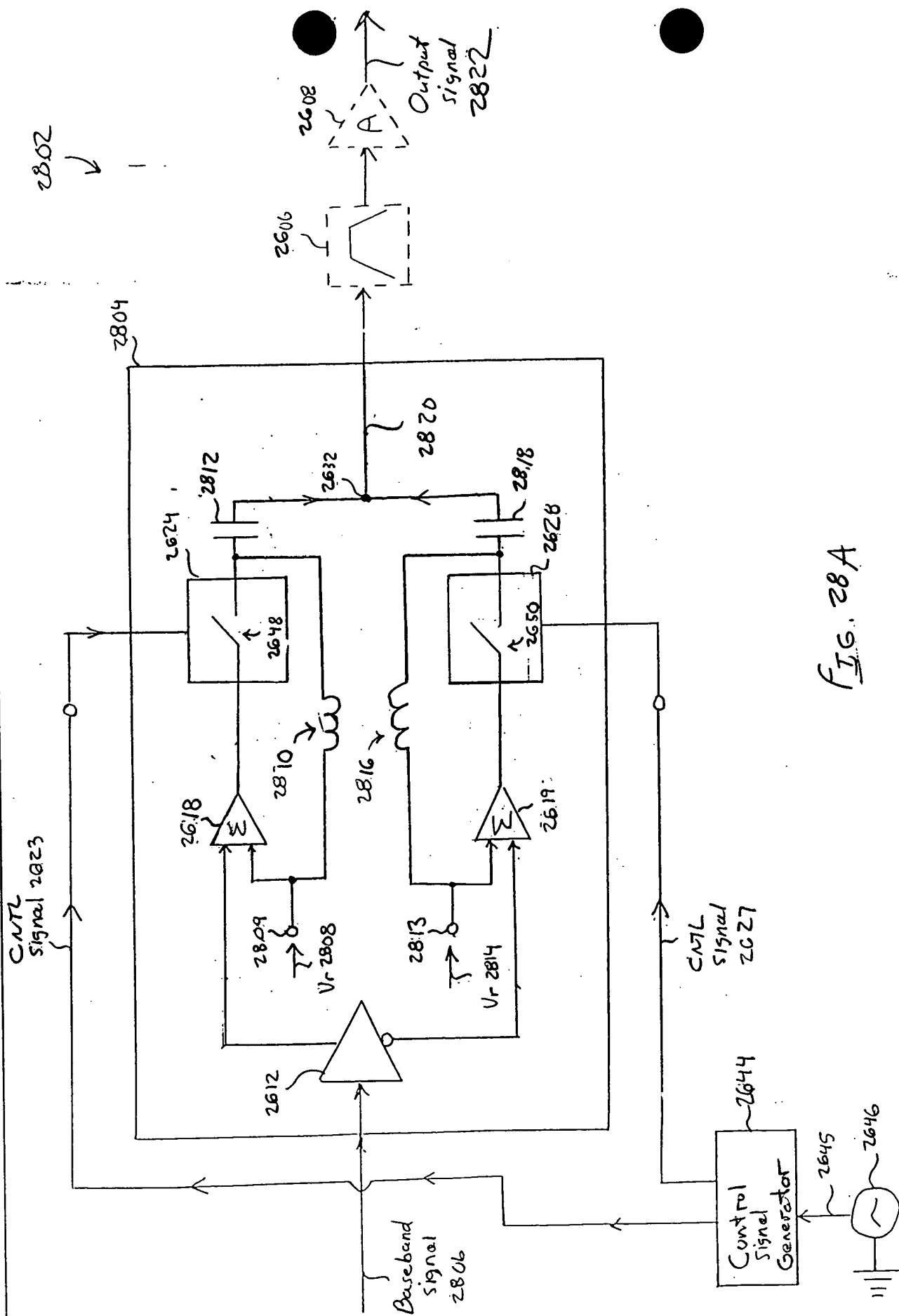
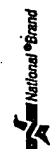


FIG. 27J



13-782 500 SHEETS, FILLER 5 SQUARE
 43-381 500 SHEETS, FILLER 5 SQUARE
 43-382 500 SHEETS, FILLER 5 SQUARE
 43-383 500 SHEETS, FILLER 5 SQUARE
 43-384 500 SHEETS, FILLER 5 SQUARE
 43-385 500 SHEETS, FILLER 5 SQUARE
 43-386 500 SHEETS, FILLER 5 SQUARE
 43-387 500 SHEETS, FILLER 5 SQUARE
 43-388 500 SHEETS, FILLER 5 SQUARE
 43-389 500 SHEETS, FILLER 5 SQUARE
 43-390 500 SHEETS, FILLER 5 SQUARE
 43-391 500 SHEETS, FILLER 5 SQUARE
 43-392 500 SHEETS, FILLER 5 SQUARE
 43-393 500 SHEETS, FILLER 5 SQUARE
 43-394 500 SHEETS, FILLER 5 SQUARE
 43-395 500 SHEETS, FILLER 5 SQUARE
 43-396 500 SHEETS, FILLER 5 SQUARE
 43-397 500 SHEETS, FILLER 5 SQUARE
 43-398 500 SHEETS, FILLER 5 SQUARE
 43-399 500 SHEETS, FILLER 5 SQUARE
 43-400 500 SHEETS, FILLER 5 SQUARE
 Made in U.S.A.



Amplitude

2820

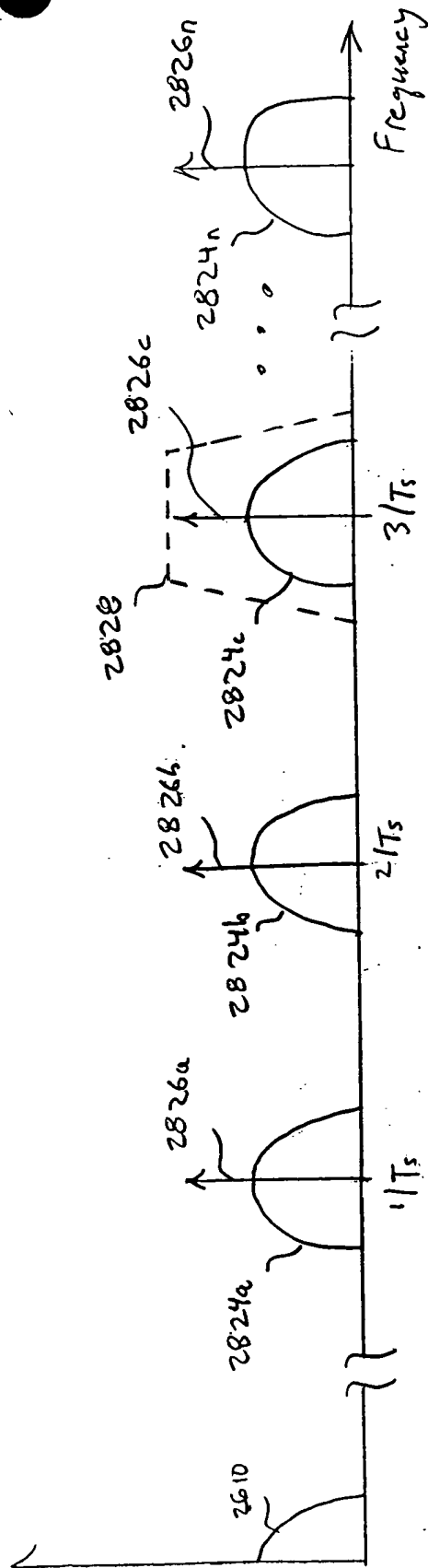


FIG. 28B

2920

2910

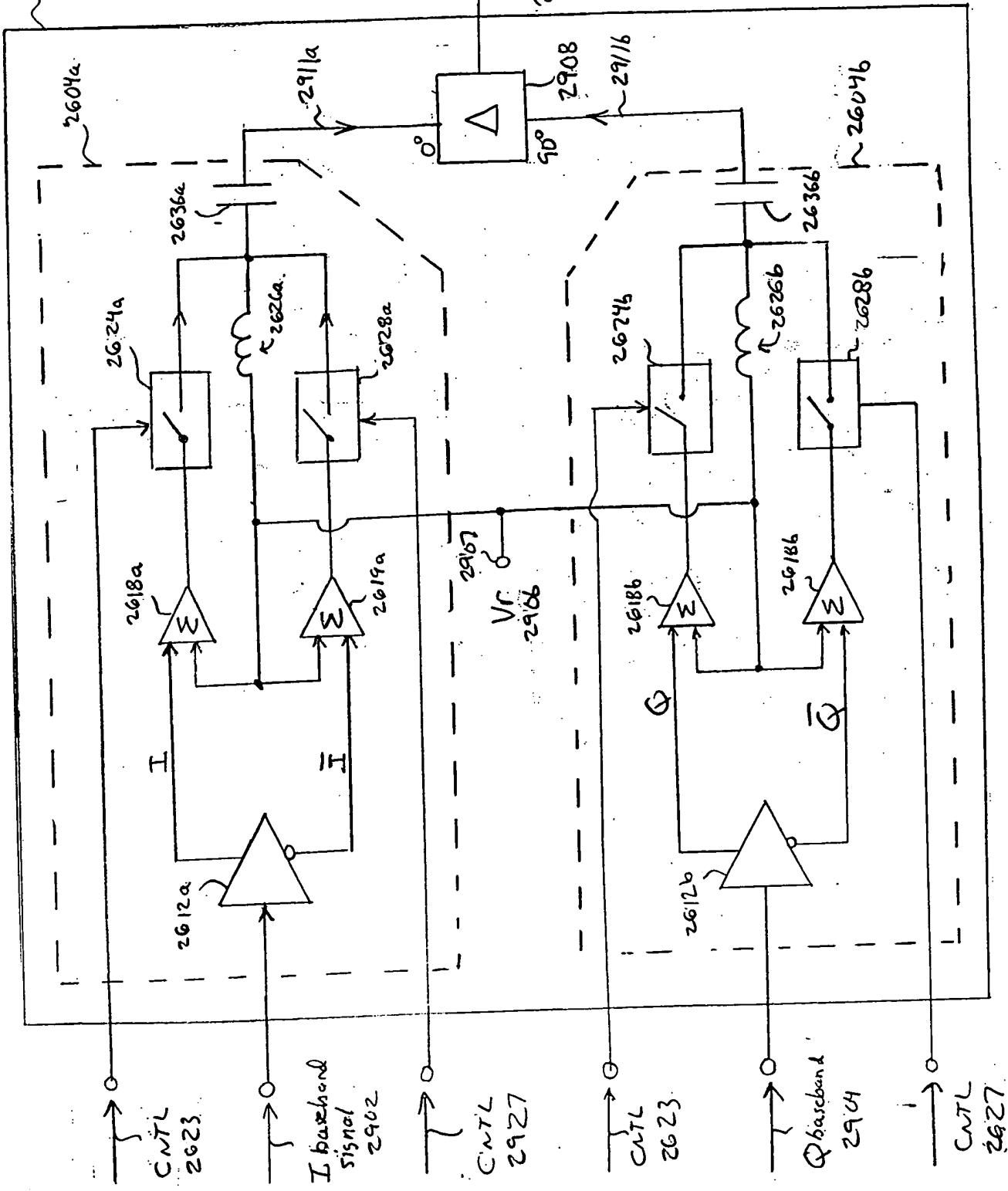
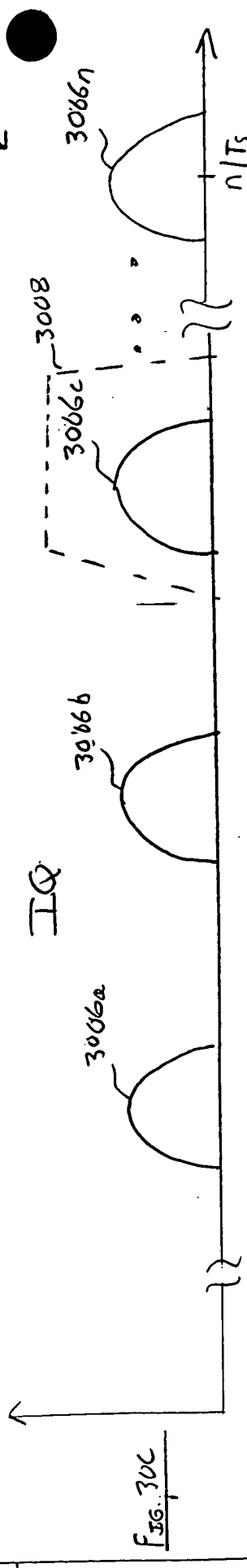
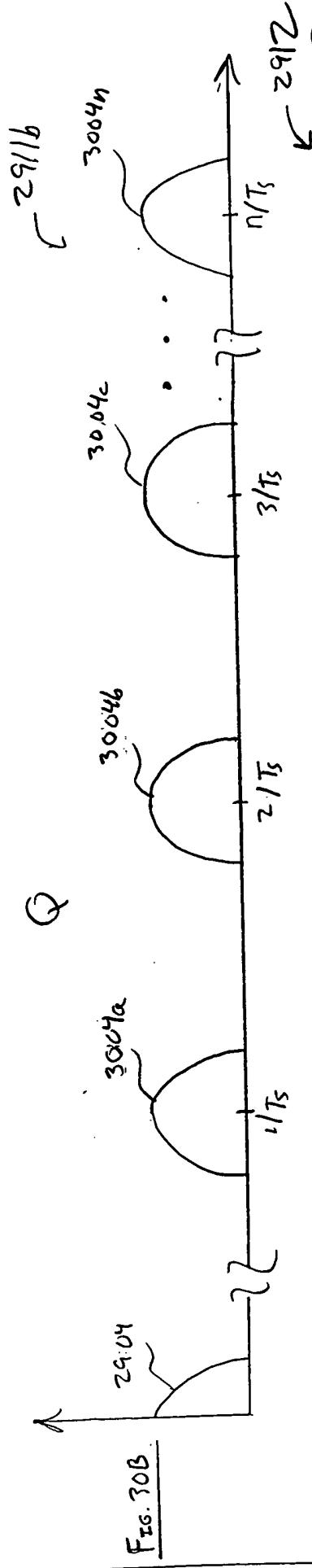
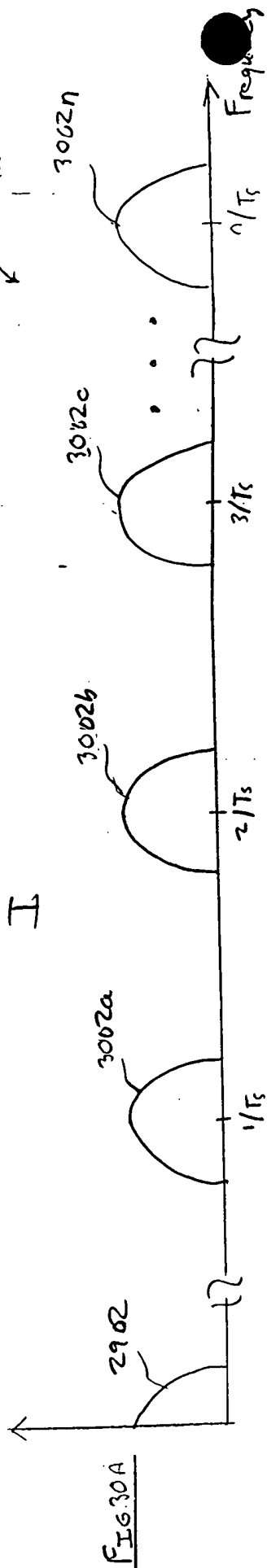


FIG. 29

Output
IQ signal
2918



3102! 3108 ↗

8152
IQ signal
OUT PUT

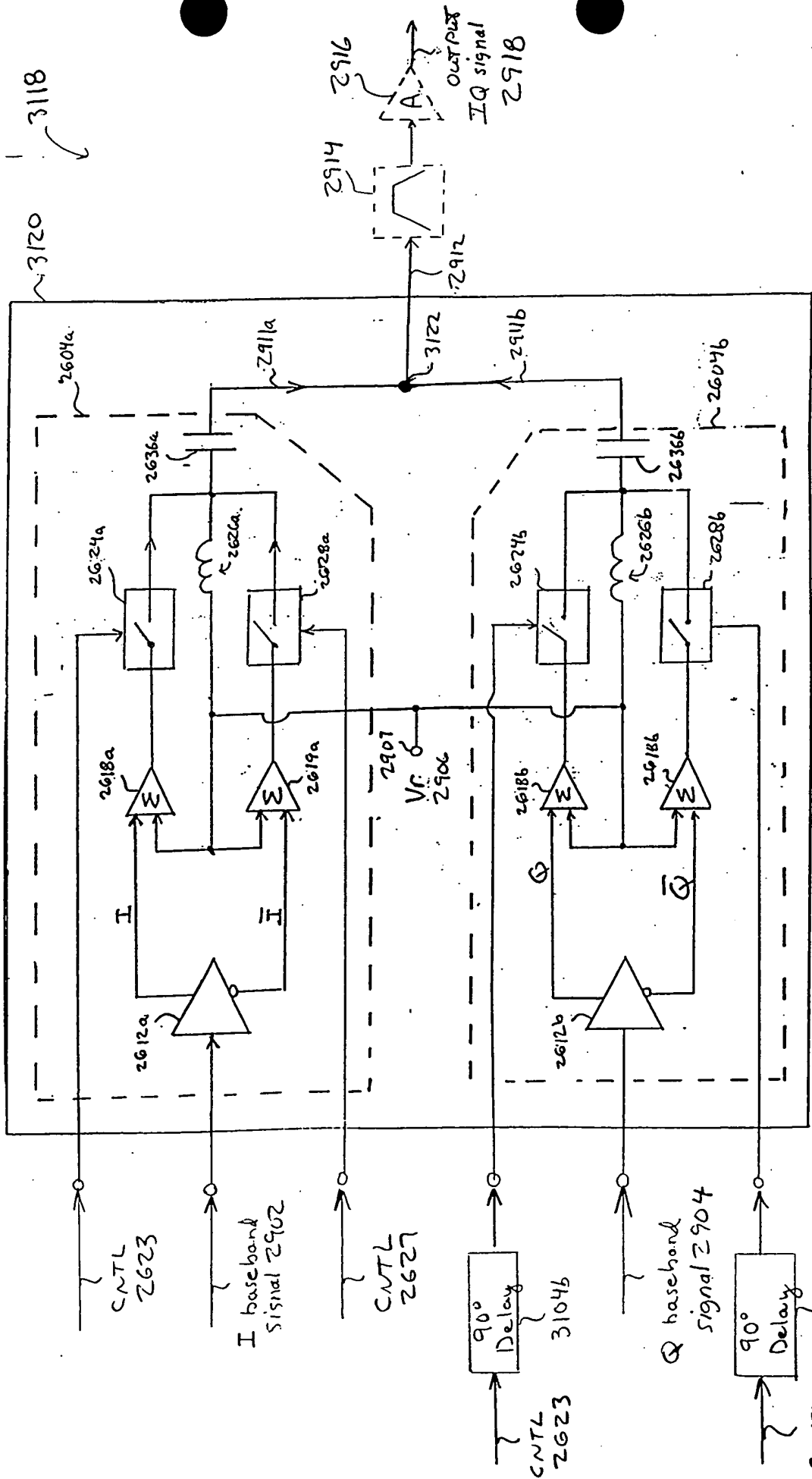


FIG. 31B

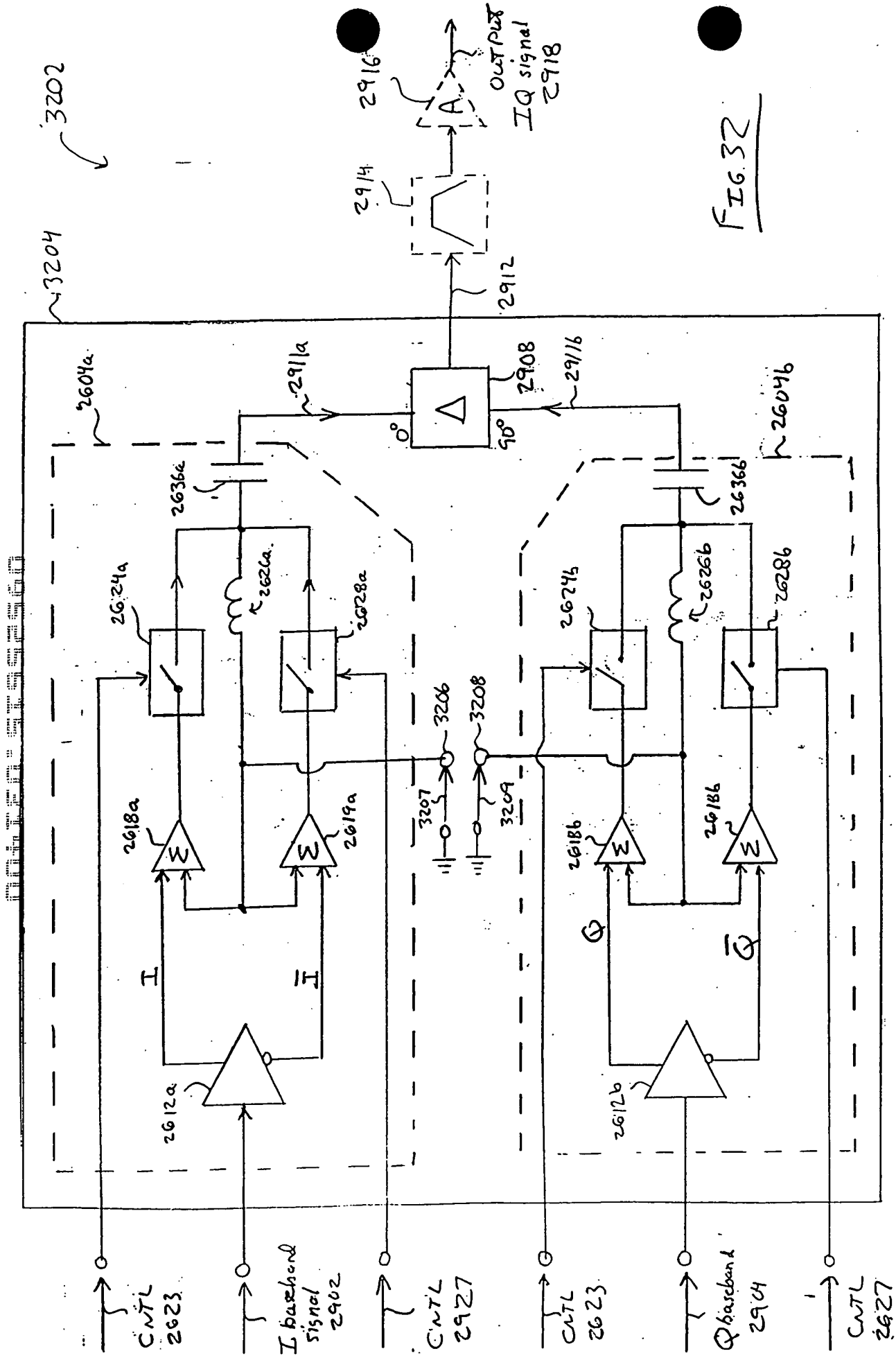
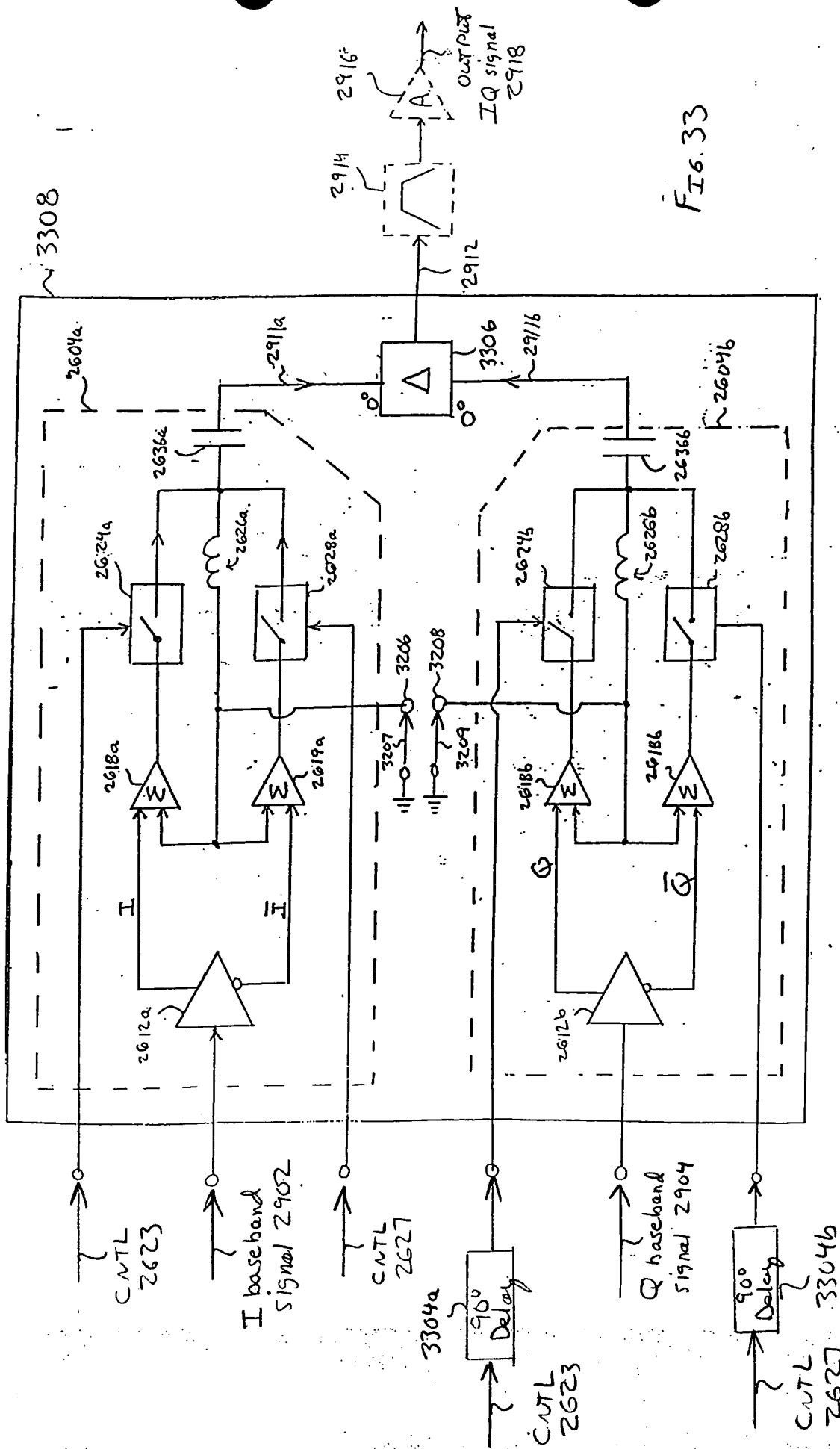


FIG. 32

3302



1. The first part of the document is a list of names and their corresponding dates. The names are: "John Doe", "Jane Smith", "Bob Johnson", "Alice Brown", "Charlie White", "David Green", "Eve Black", "Frank Gray", "Grace Pink", "Henry Blue", "Ivy Yellow", "Jack Purple", "Karen Red", "Leo Orange", "Mia Silver", "Noah Gold", "Olivia Bronze", "Pete Copper", "Quinn Iron", "Rory Steel", "Sam Tin", "Tina Lead", "Uma Zinc", "Victor Nickel", "Wendy Platinum", "Xavier Silver", "Yara Gold", "Zoe Bronze". The dates are: "1990-01-01", "1990-02-01", "1990-03-01", "1990-04-01", "1990-05-01", "1990-06-01", "1990-07-01", "1990-08-01", "1990-09-01", "1990-10-01", "1990-11-01", "1990-12-01", "1991-01-01", "1991-02-01", "1991-03-01", "1991-04-01", "1991-05-01", "1991-06-01", "1991-07-01", "1991-08-01", "1991-09-01", "1991-10-01", "1991-11-01", "1991-12-01", "1992-01-01", "1992-02-01", "1992-03-01", "1992-04-01", "1992-05-01", "1992-06-01", "1992-07-01", "1992-08-01", "1992-09-01", "1992-10-01", "1992-11-01", "1992-12-01".

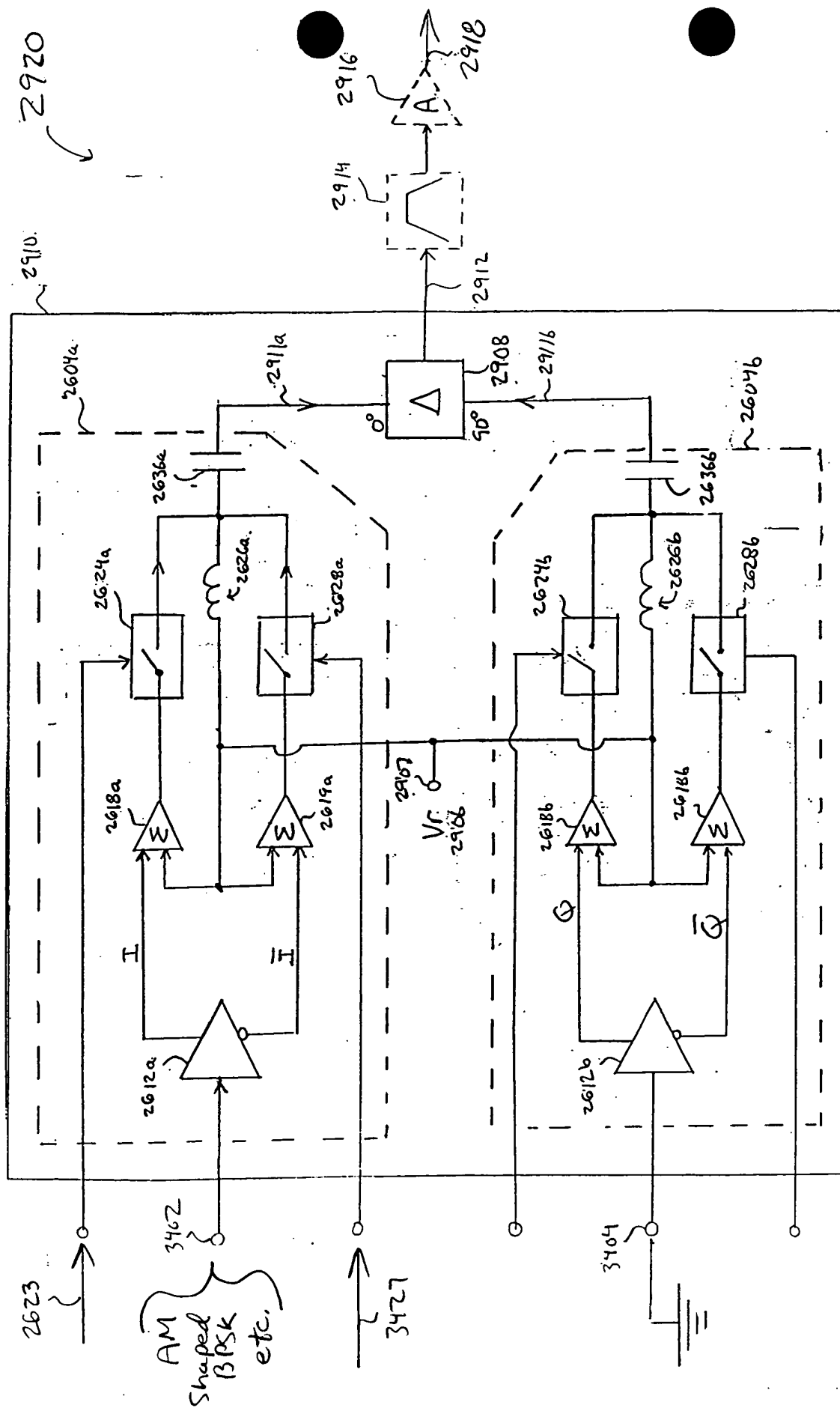


FIG. 34A

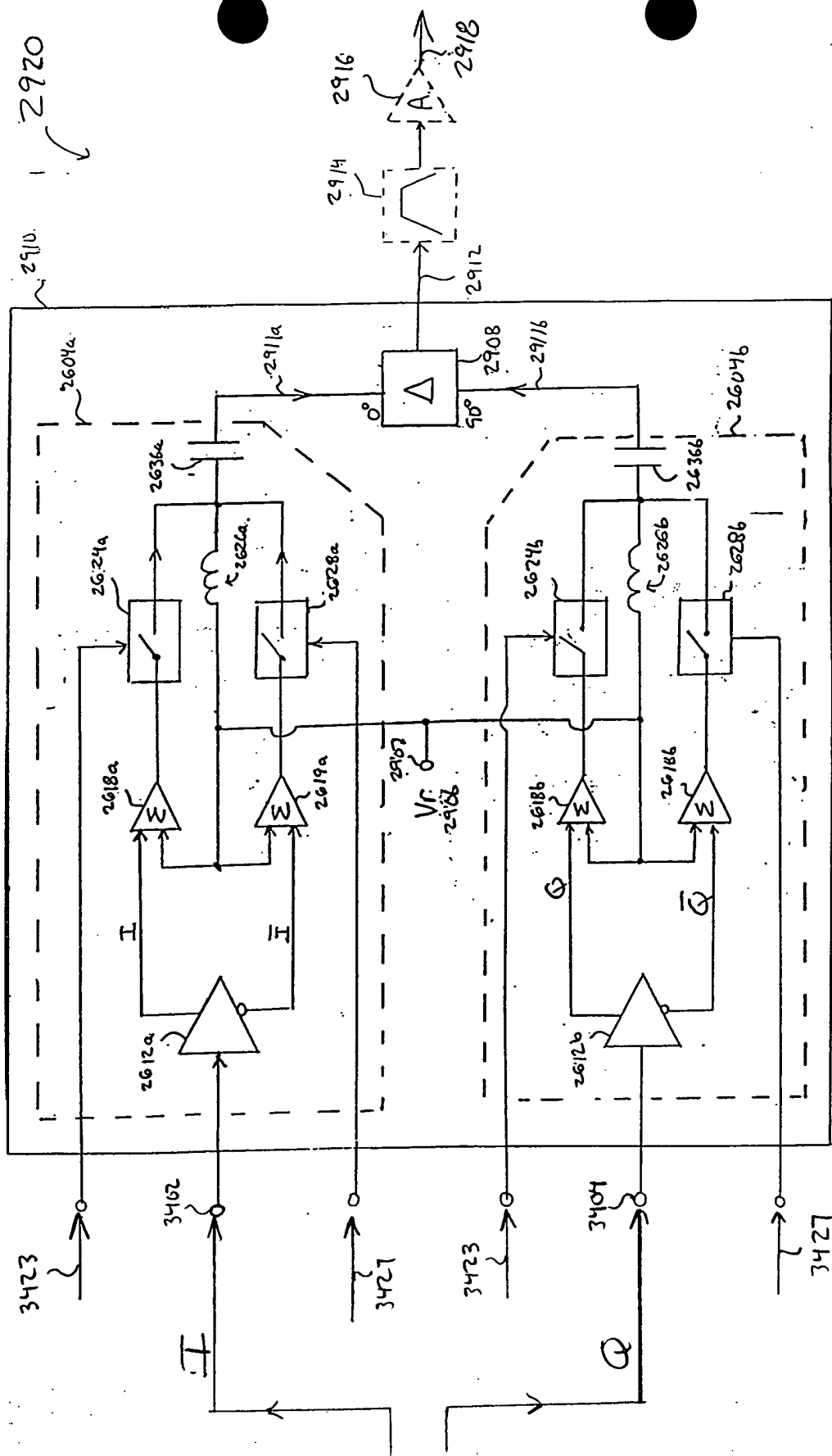
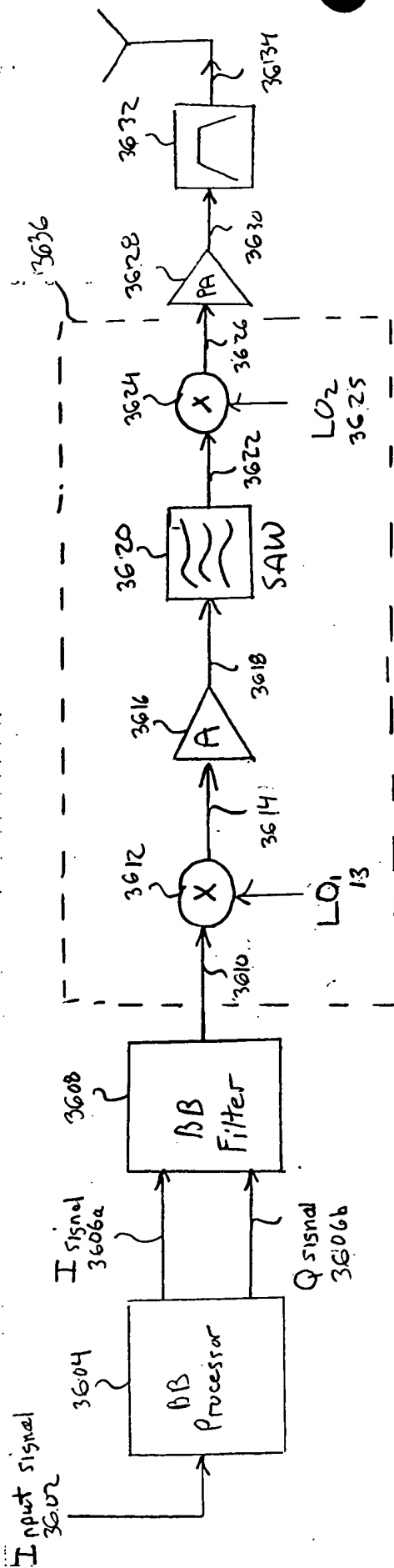


FIG. 34B

FM
QPSK
QAM
OFDM
CDMA
FH
GSM
PM
etc.



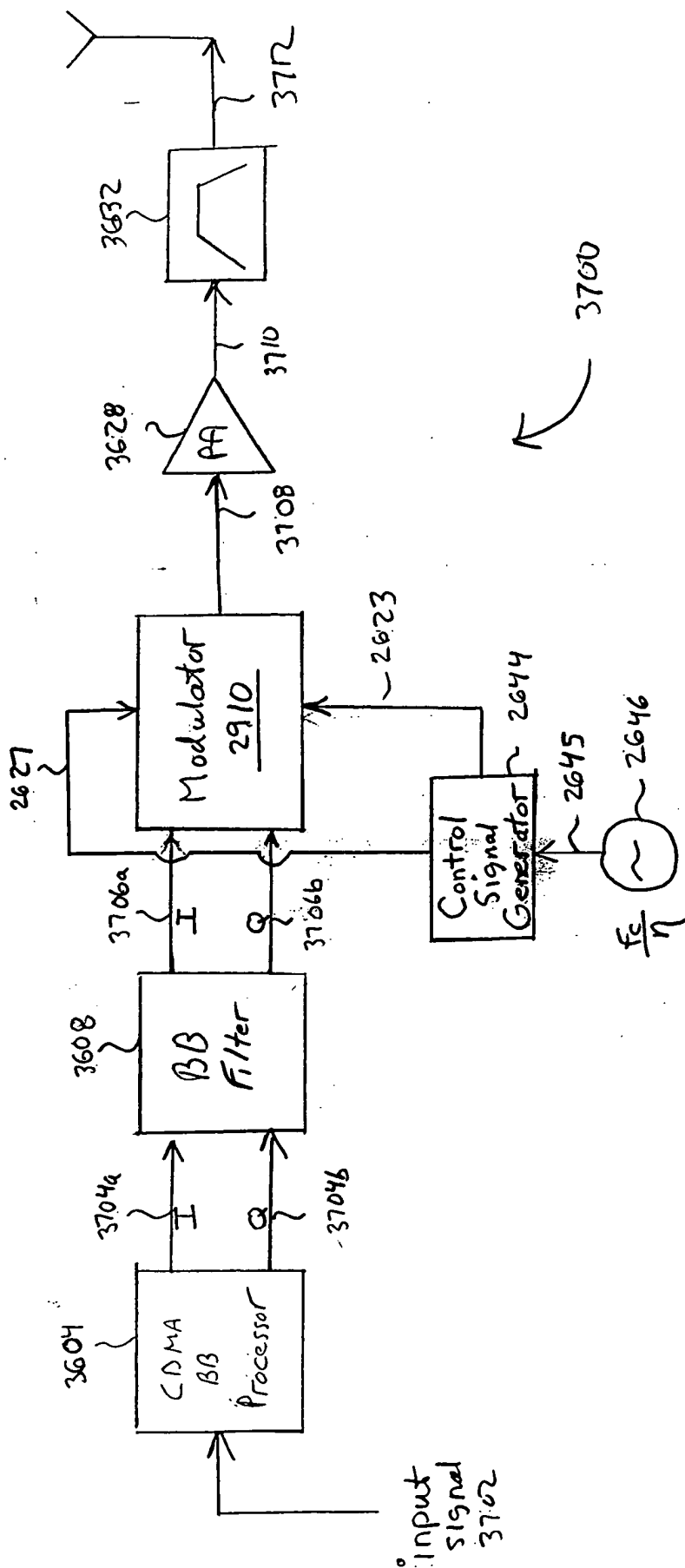


FIG. 37A: CDMA Transmitter

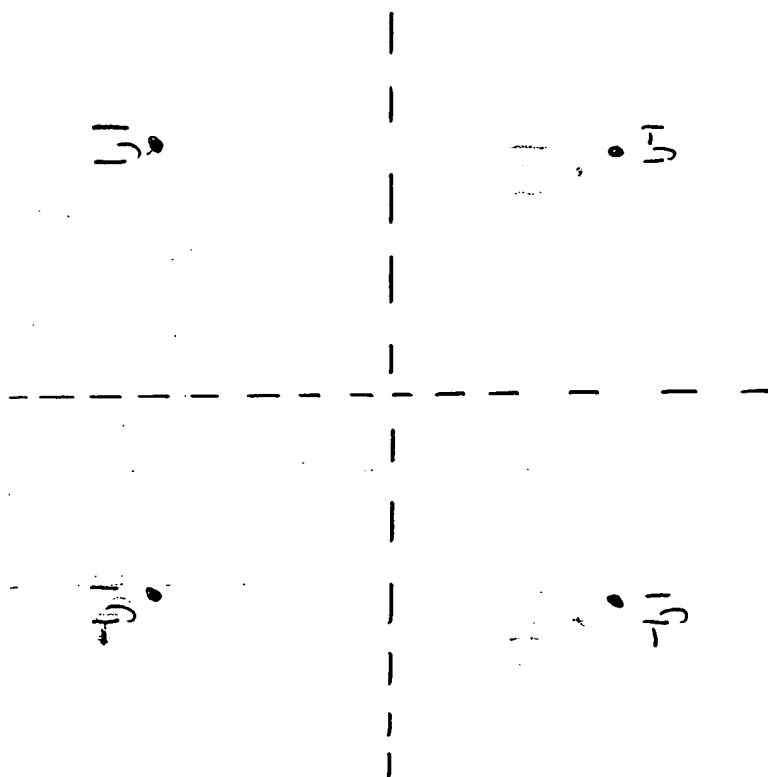


Fig. 370

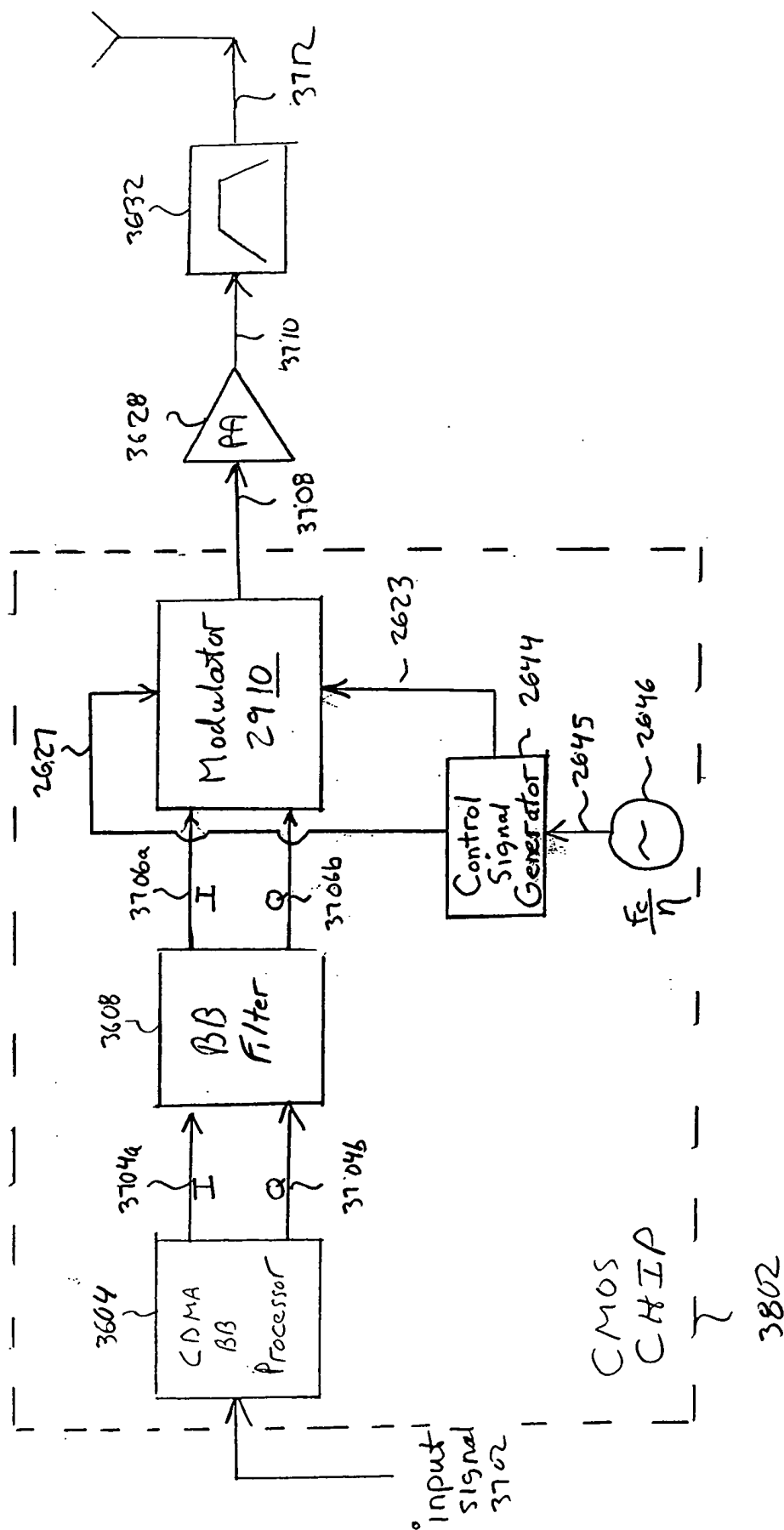


FIG. 38: CDMA CMOS CHIP

3900

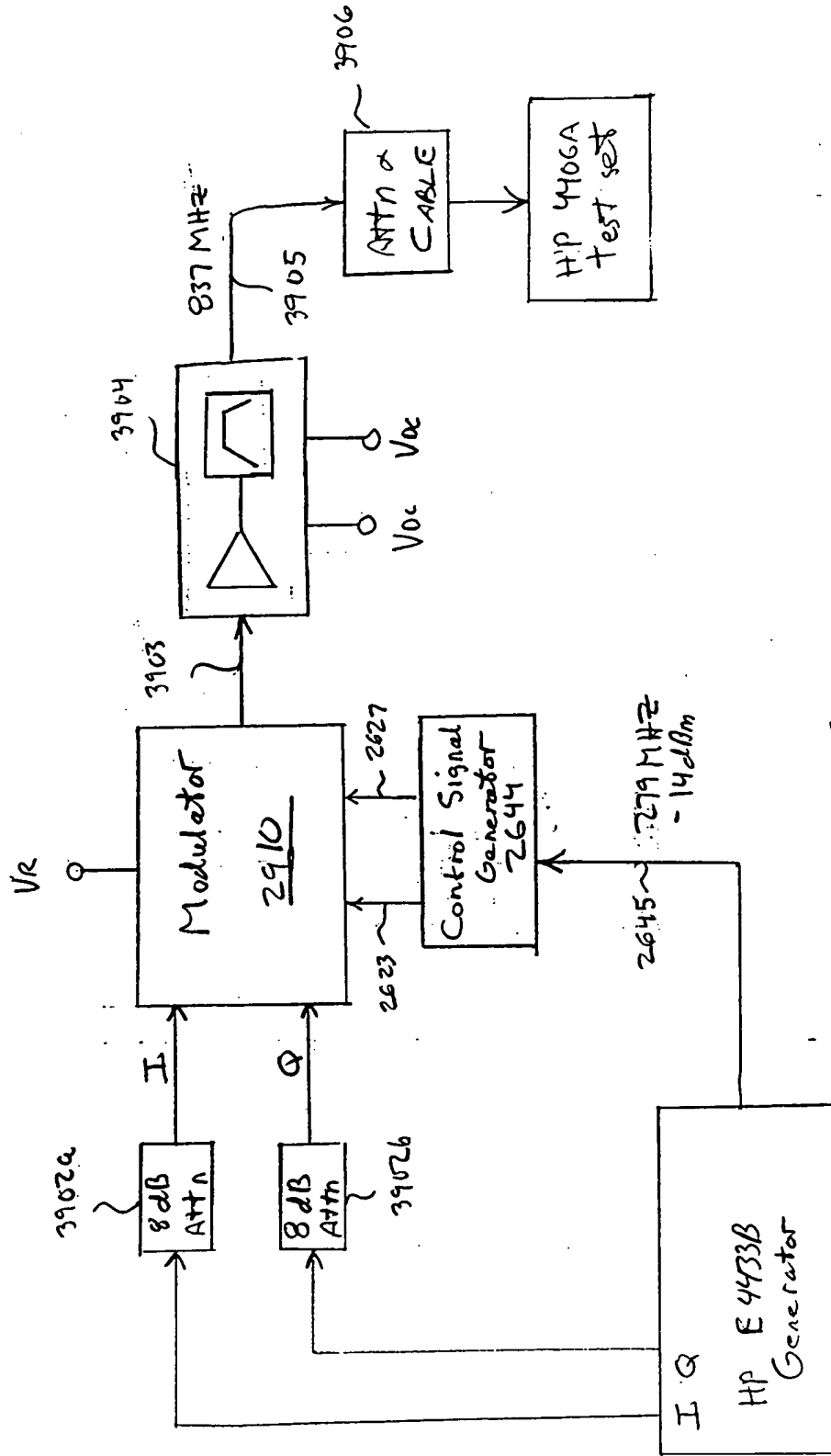


Fig. 39

Base Station

4002 ~

FIG. 40

RHO	0.9970
EVM	5.51%
PHASE ERROR	1.80°
MAGNITUDE ERROR	4.53%
CARRIER INSERTION	-37.91 dB
PA POWER OUT	28.06 dBm

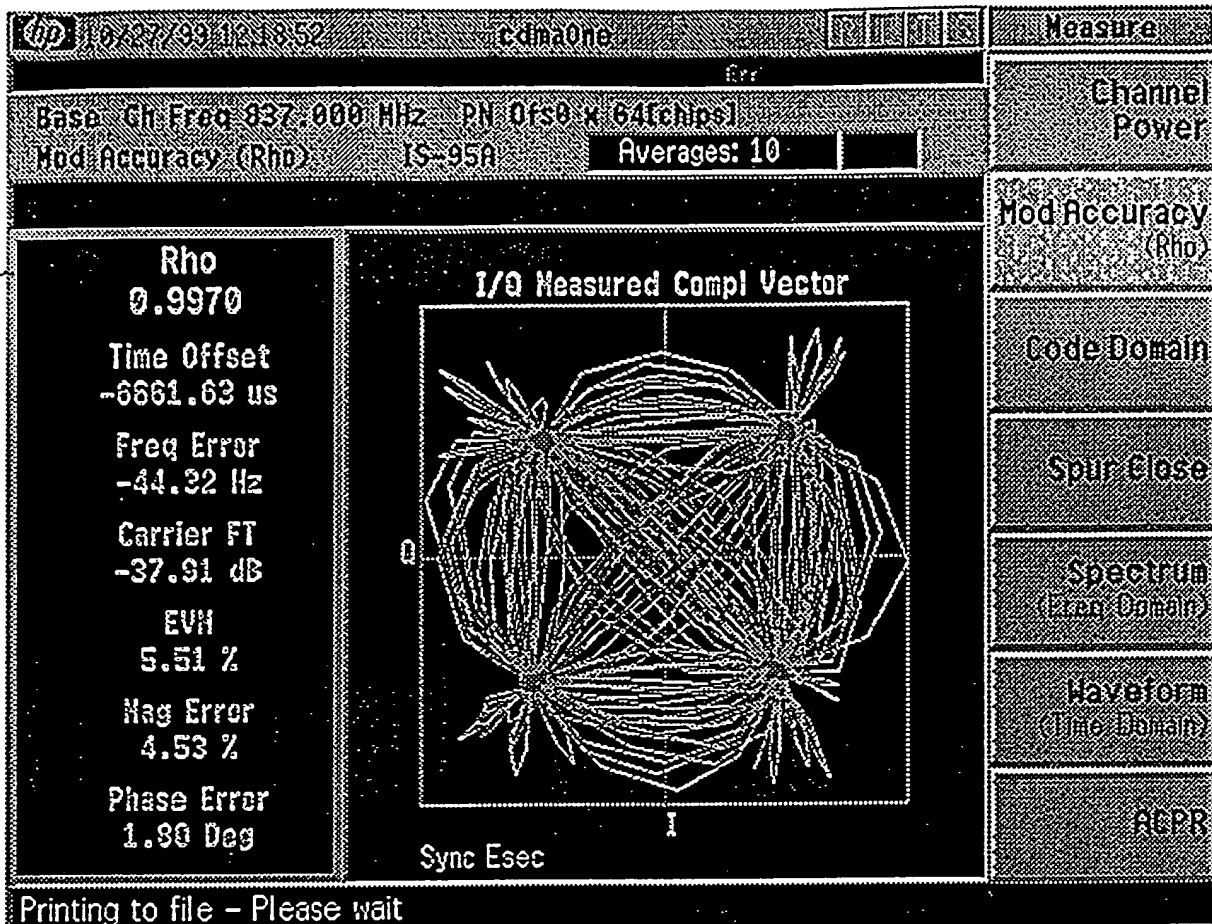
FREQUENCY (MHz) (Mobile Station)

	<i>LOW</i>	<i>MIDDLE</i>	<i>HIGH</i>
RHO	0.9892	0.9969	0.9892
EVM	10.39%	5.54%	10.39%
PHASE ERROR	4.47°	2.24°	4.08°
MAGNITUDE ERROR	6.84%	4.21%	8.27%
CARRIER INSERTION	-40.15 dB	-44.58 dB	-35.27 dB
PA POWER OUT	27.36 dBm	28.11 dBm	27.55 dBm

~ 4102

FIG. 41

4202
↓

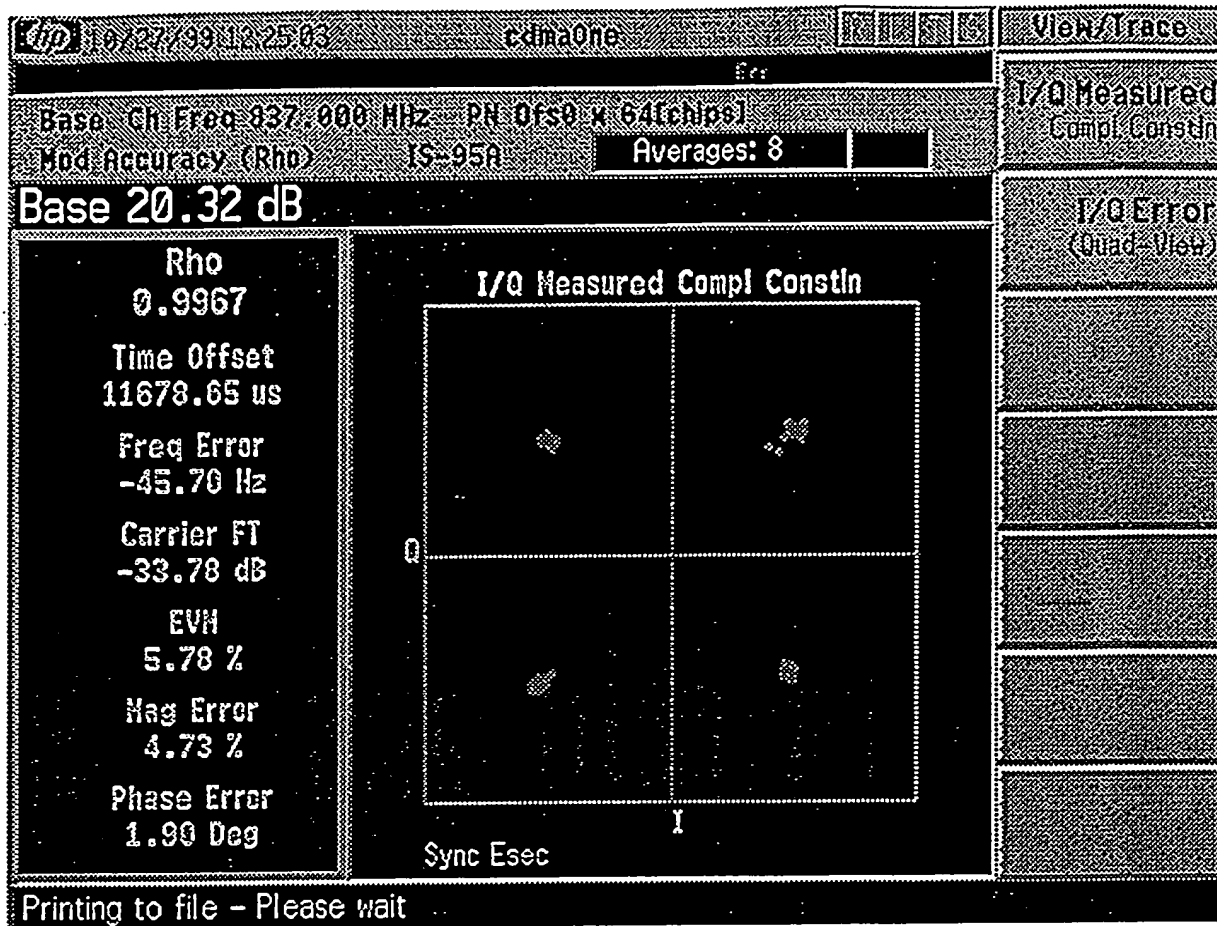


Base Station Constellation for Pilot Channel Test

FIG. 42

00420-01552500

4302
↓



↓



FIG. 44

[illegible]

10/28/99 06:25:51 cdmaOne

View/Trace

Err

Mobile Ch Freq 837.000 MHz PN 0fs0 x 64[chips]

Mod Accuracy (Rho) IS-95A Averages: 2

I/Q Measured Compl Constn

I/Q Error (Quad-View)

Rho
0.9970

Time Offset
-12448.59 us

Freq Error
-46.85 Hz

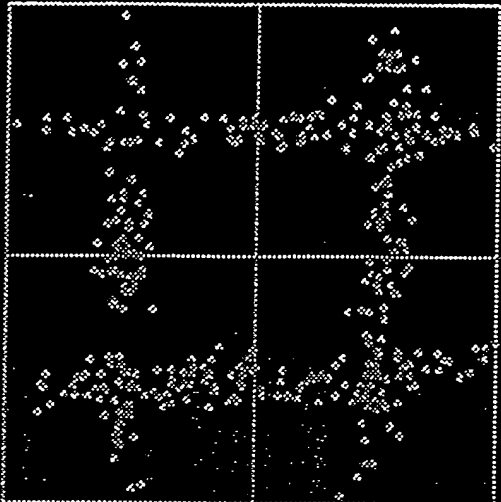
Carrier FT
-44.18 dB

EVH
5.51 %

Mag Error
4.19 %

Phase Error
2.23 Deg

I/Q Measured Compl Constn



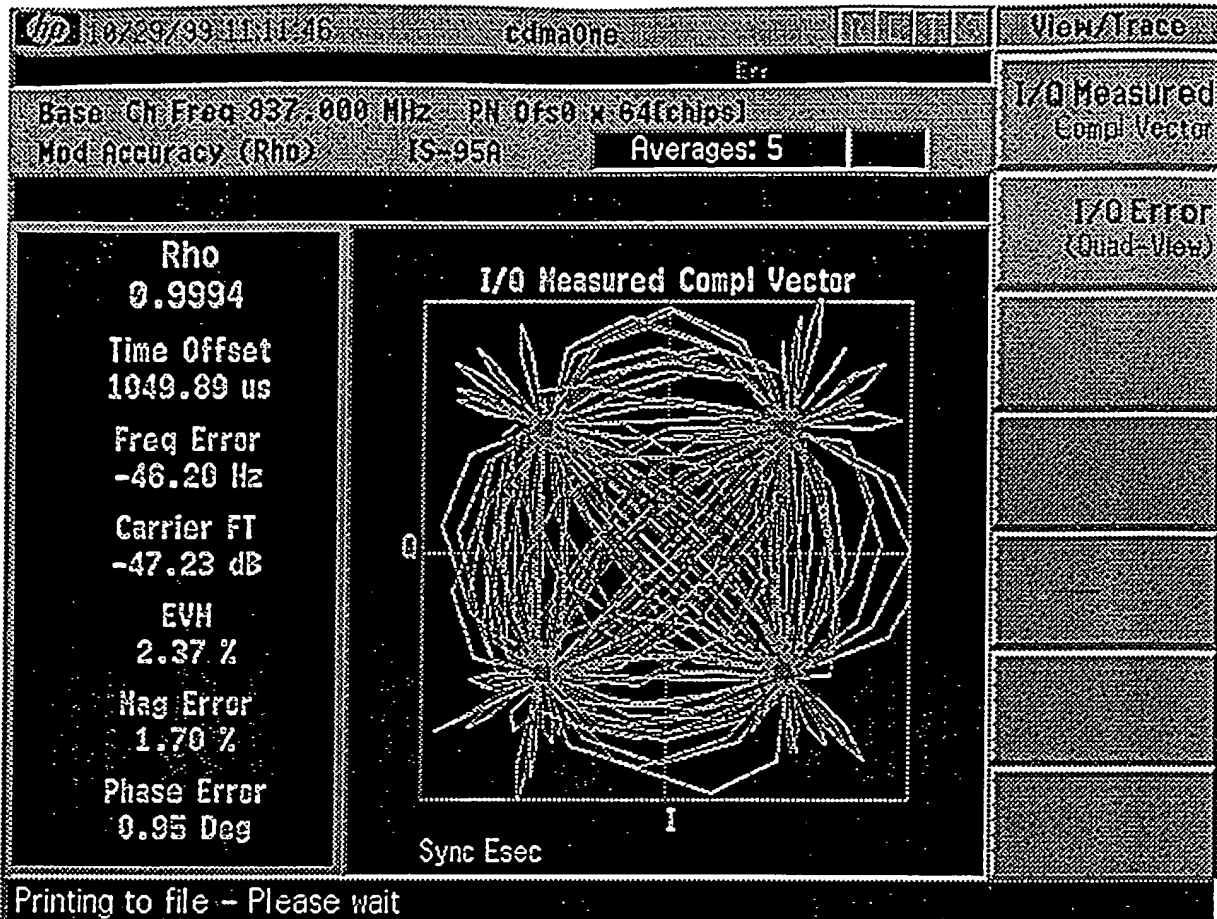
Sync Esec

Printing to file - Please wait

Mobile Station Sampled Constellation

FIG. 45

4602
J

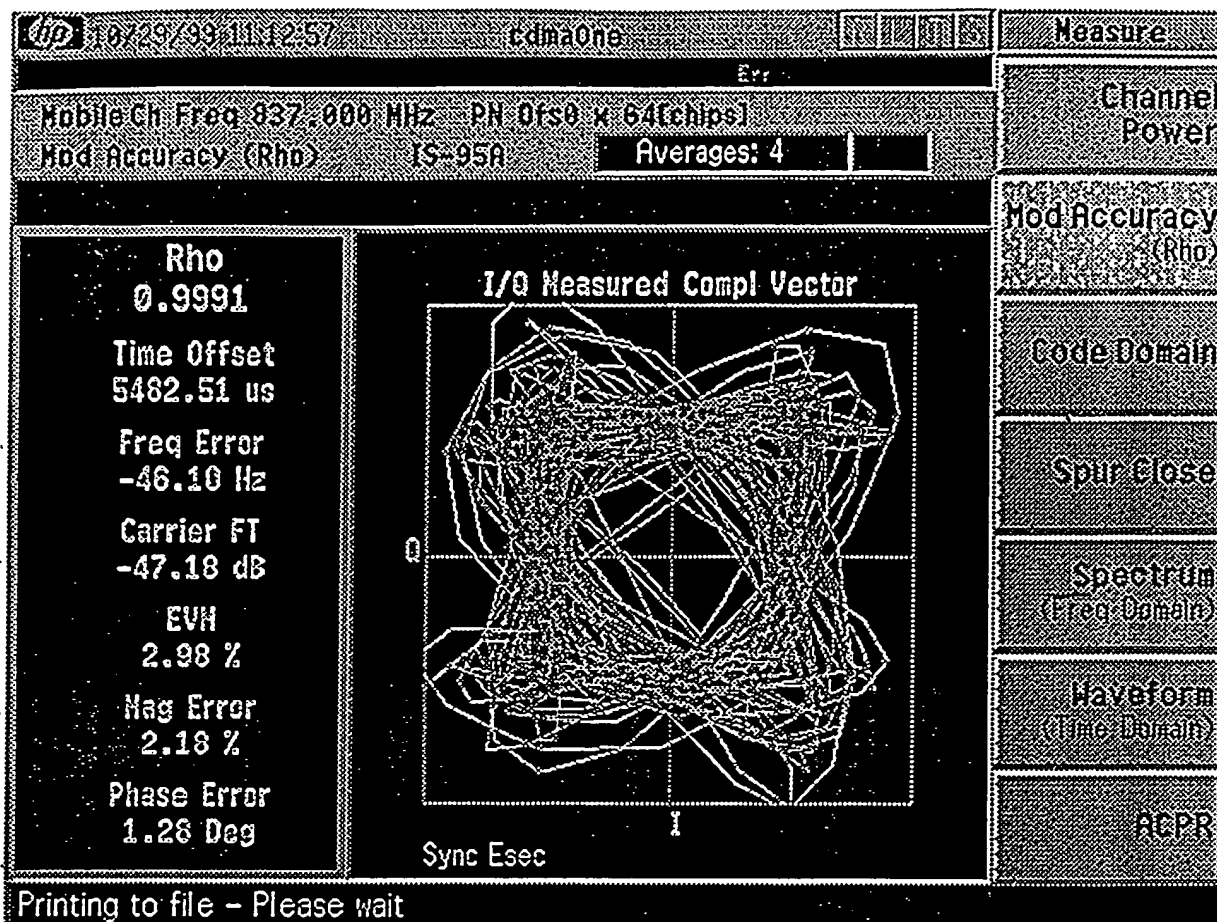


Base Station Constellation using only H/P Test Equipment

FIG. 46

001100 9155500

4702
↓

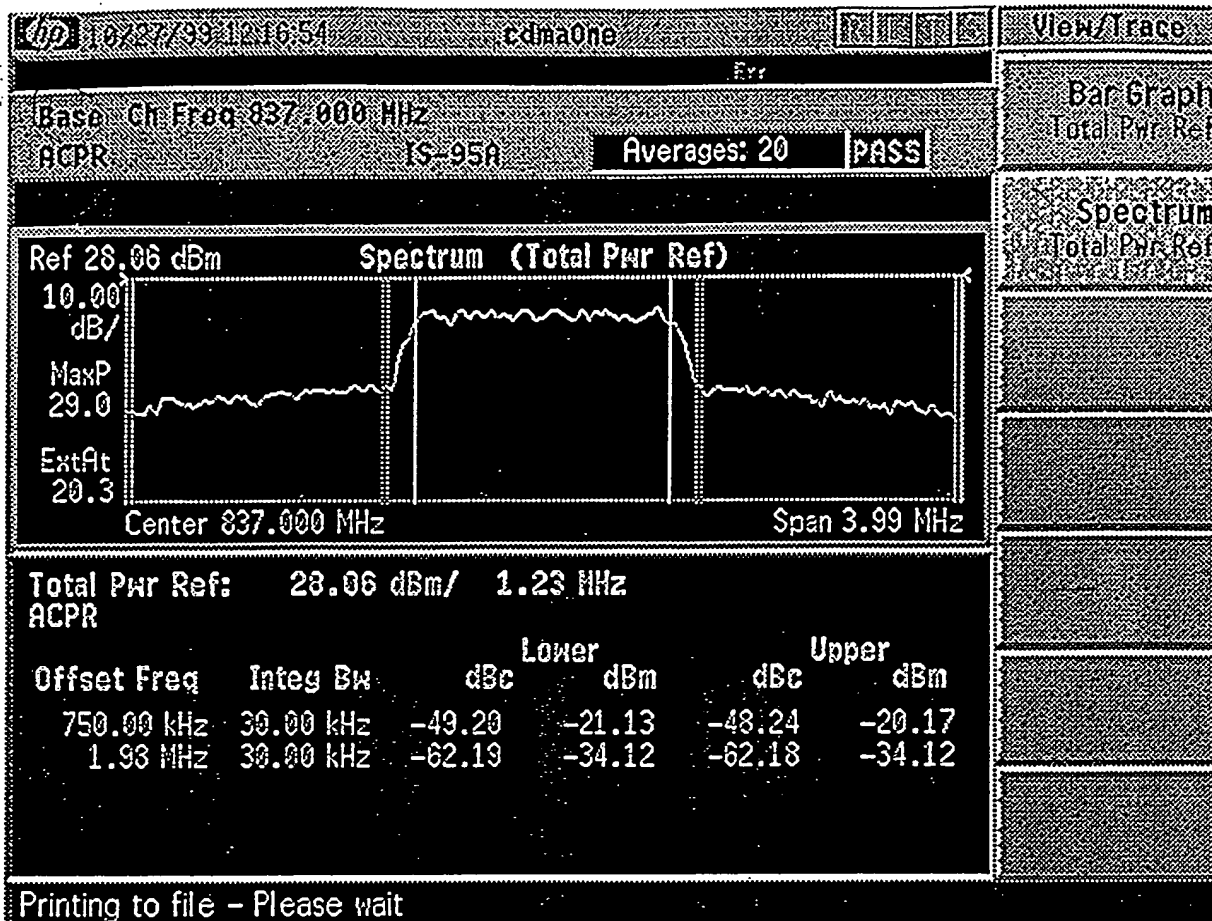


Mobile Constellation using only H/P Test Equipment

FIG. 47

001101-51395560

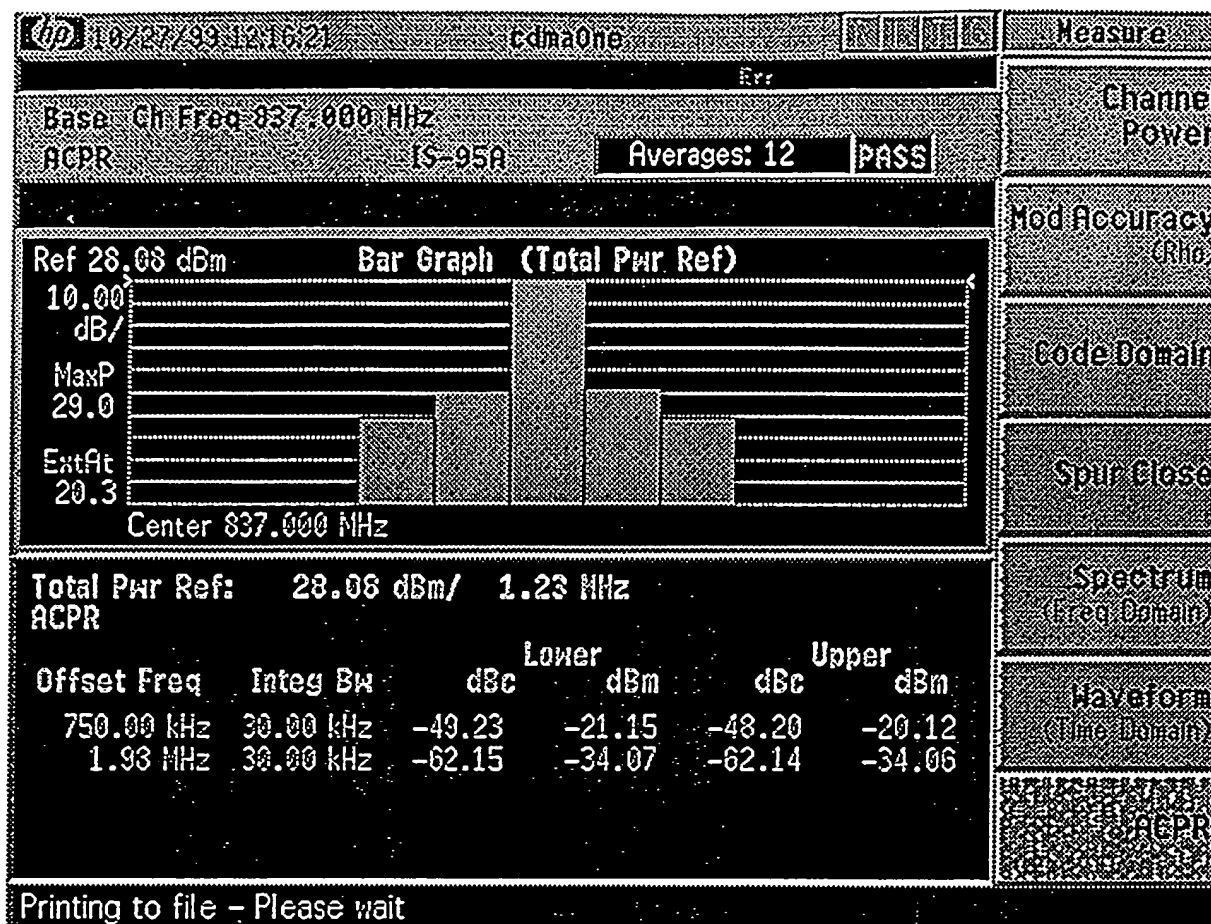
4802
↓



00400555560

FIG 48

4902
↓



Base Station Spectral Response with Mask

FIG. 49

001100 990900

5062

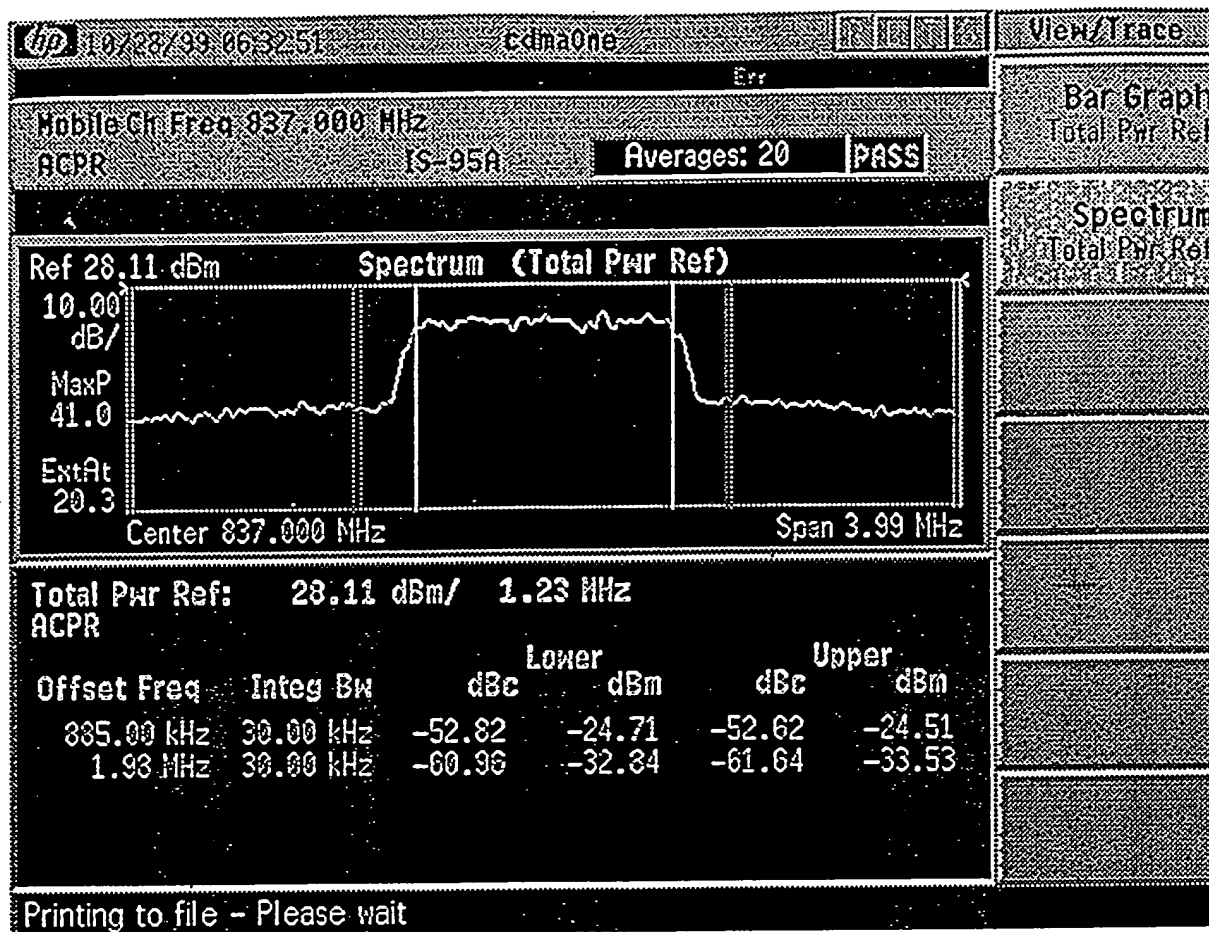


FIG. 50

001100-51332560

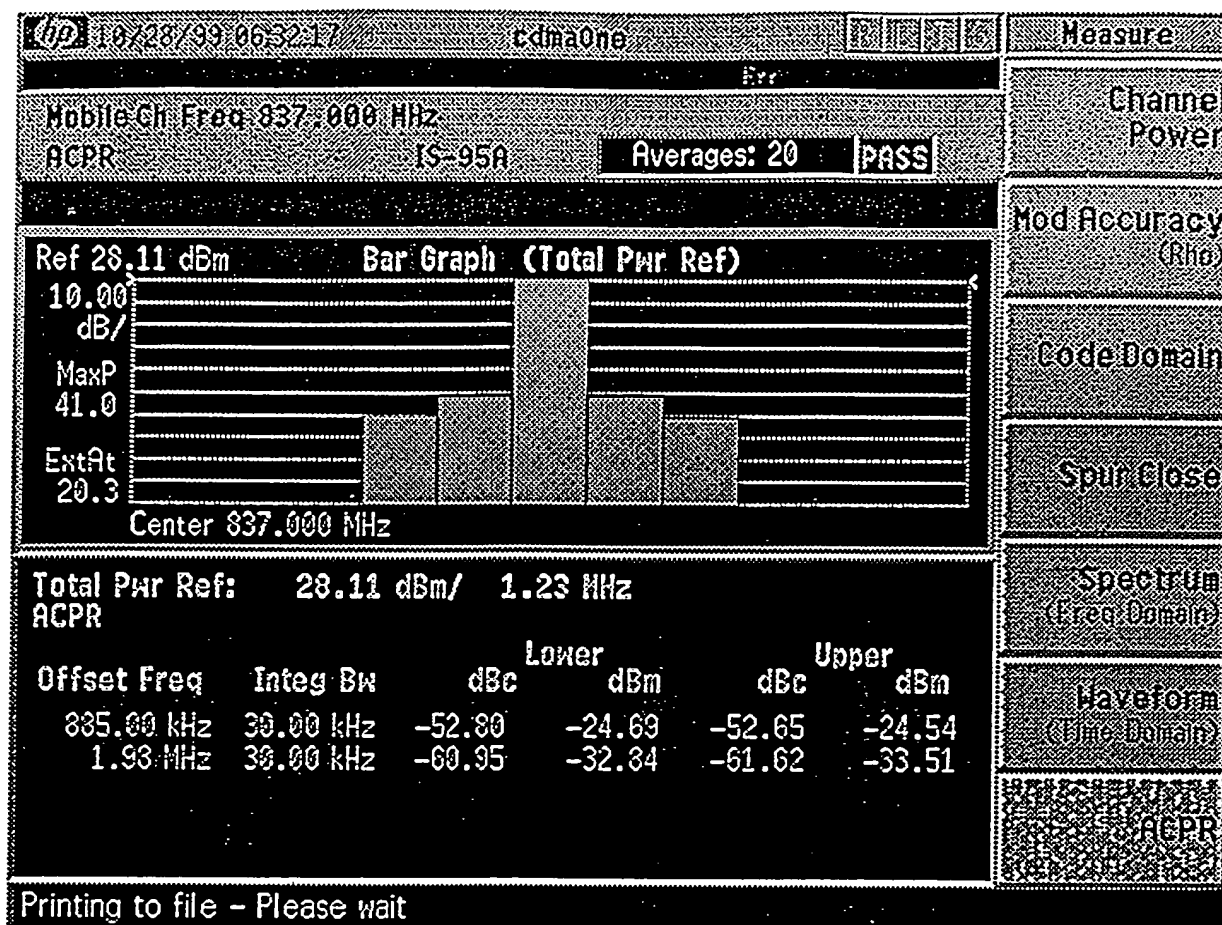


Figure 3.2-2 Mobile Station Spectral Response with Mask

P_{IG. 51}

Err
 Base Ch Freq 837.000 MHz - PN 0fs6 x 64[chips]
 Code Domain IS-95A Averages: 5

Ref 0.00 dB
 5.00 dB/
 Sync Esec
 Halsh Channel 32 63
 Act Set Th -20.00 dB

Time Ofs: 5882.3 us	Pilots: 0.0 dB	Avg AT: -999.0 dB
Freq Error: -44.9 Hz	Paging: -43.1 dB	Max IT: -40.2 dB
Carrier FT: -34.7 dB	Sync: -41.7 dB	Avg IT: -42.9 dB

Measure
 Channel Power
 Mod Accuracy (Rho)
 Code Domain
 Spur Close
 Spectrum (Freq Domain)
 Waveform (Time Domain)
 ACPR

Printing to file - Please wait

CDMA Crosstalk

FIG. 52A

Sequence for IQ Input Level Variance

FIG 52B

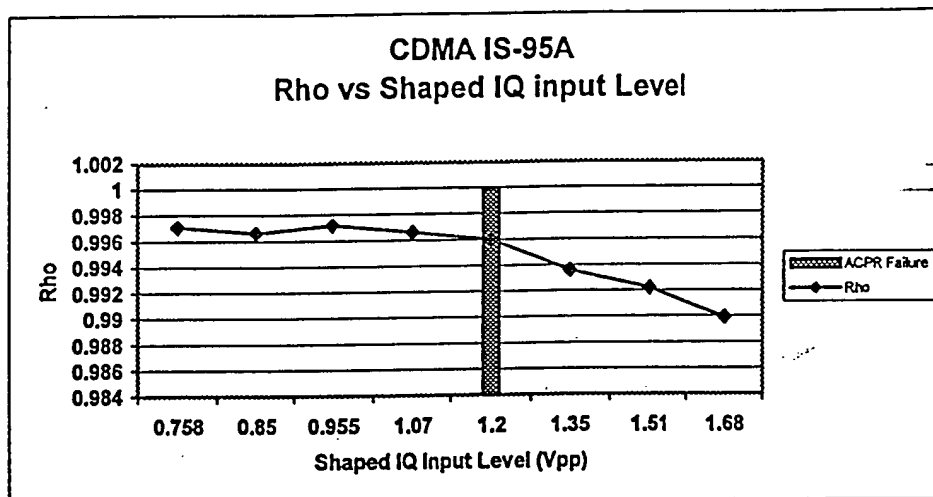


FIG 52C

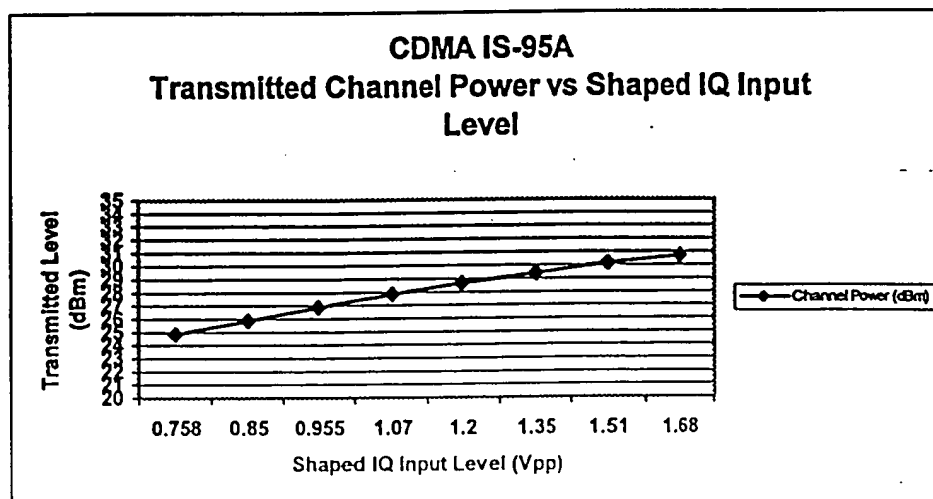


FIG 52D

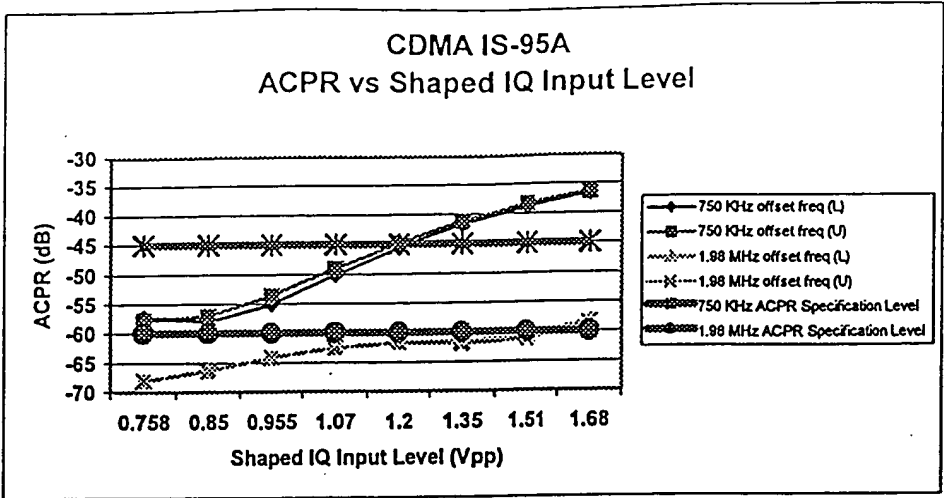


FIG 52E

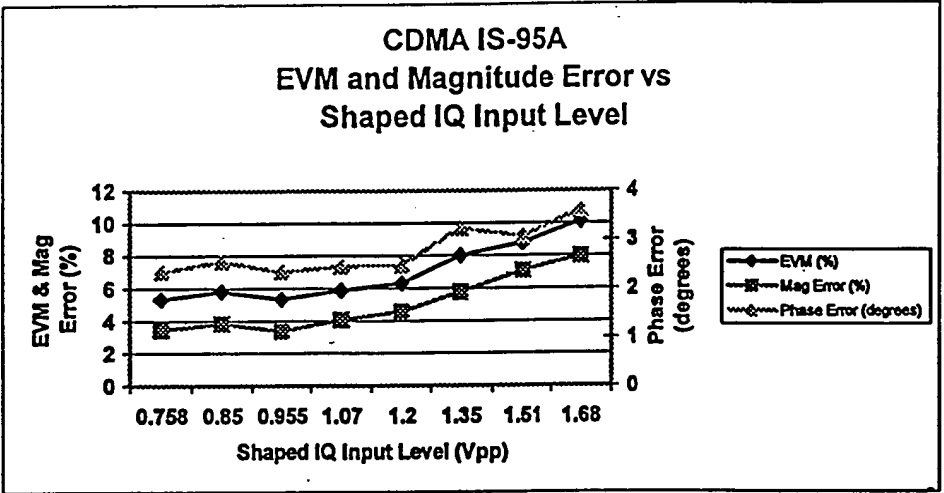
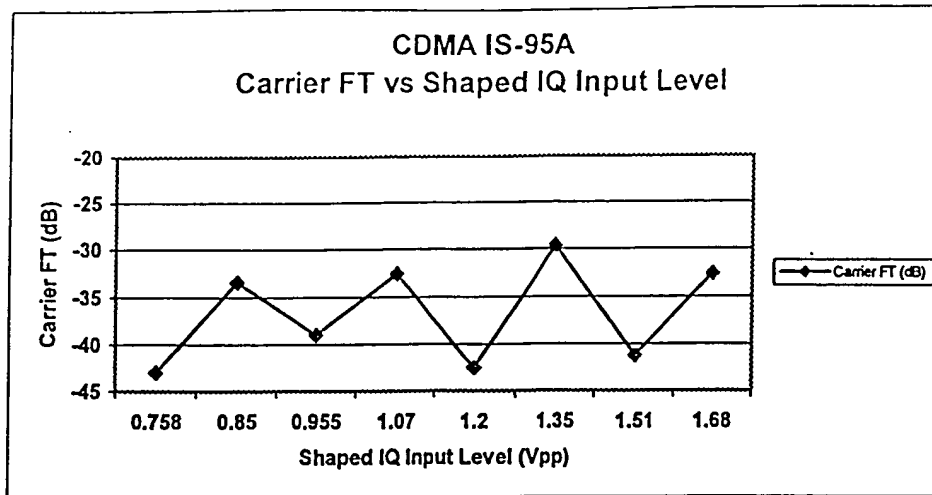


FIG. 52F



Sequence for LO Variance

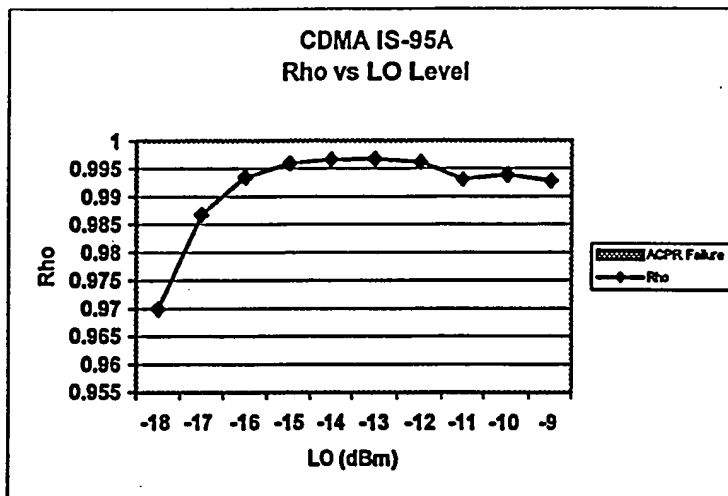


FIG. 52G

FIG. 52H

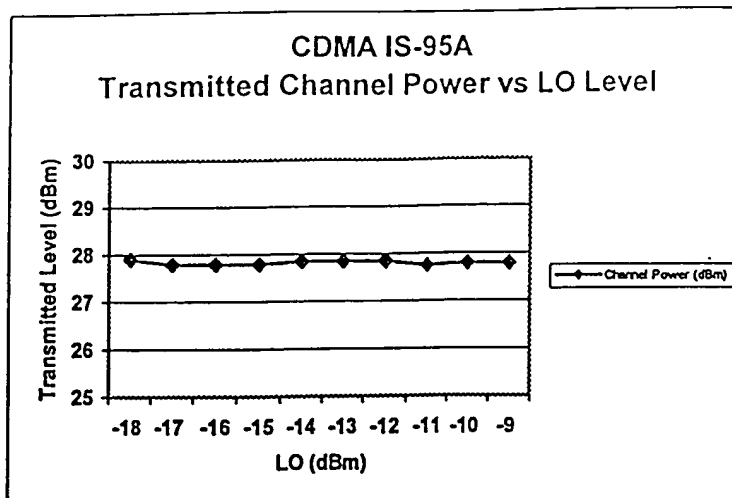
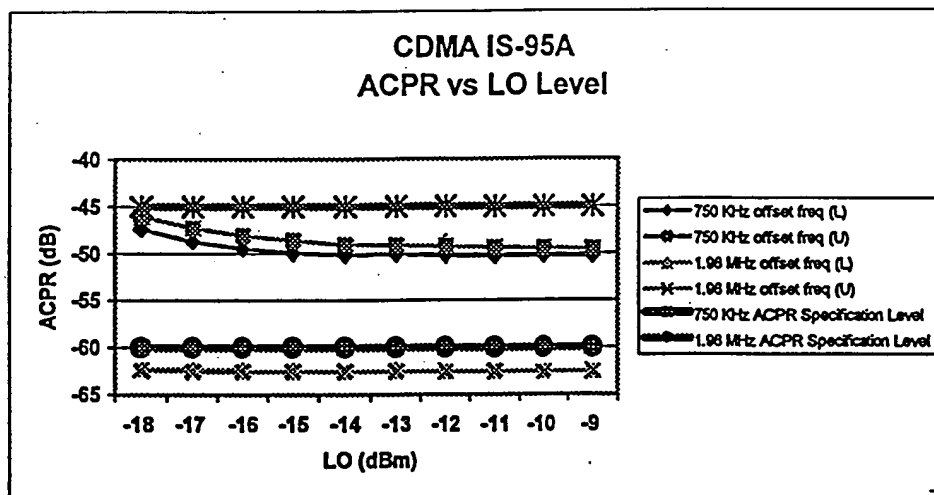


FIG. 52I



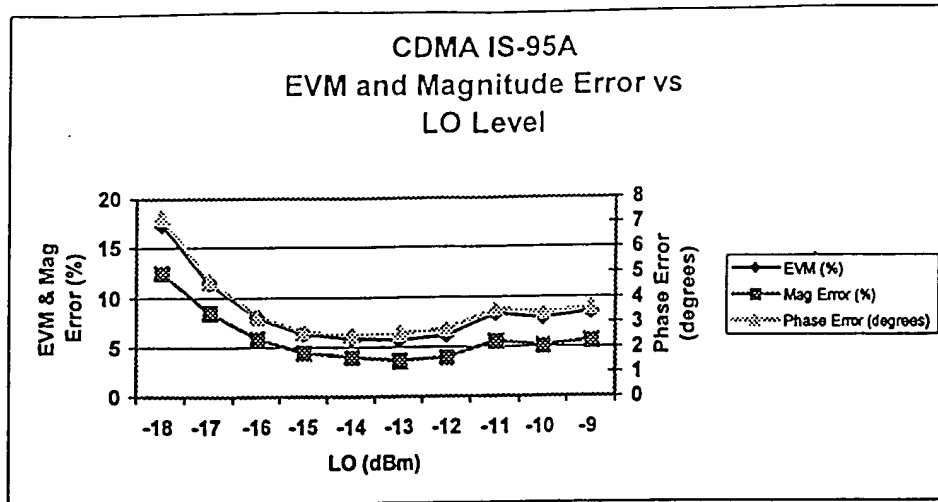
[illegible]

FIG. 52K

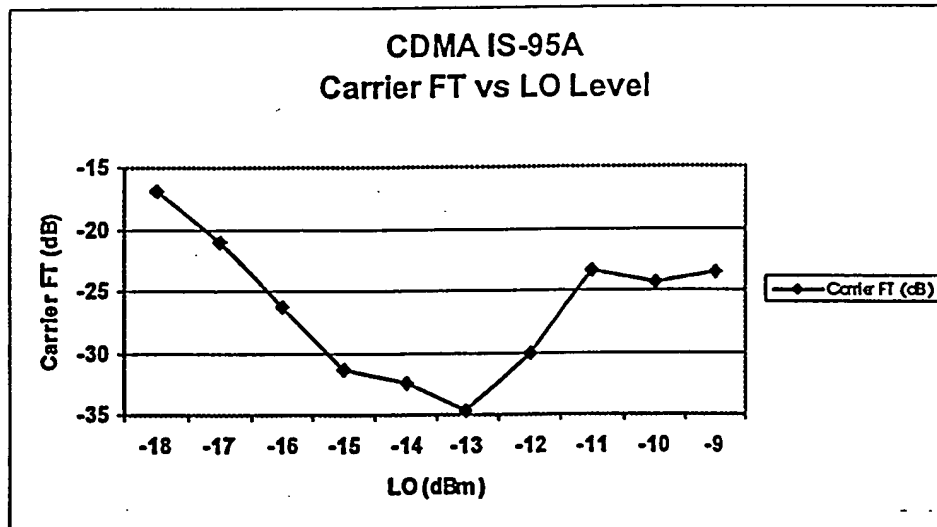


FIG. 52L

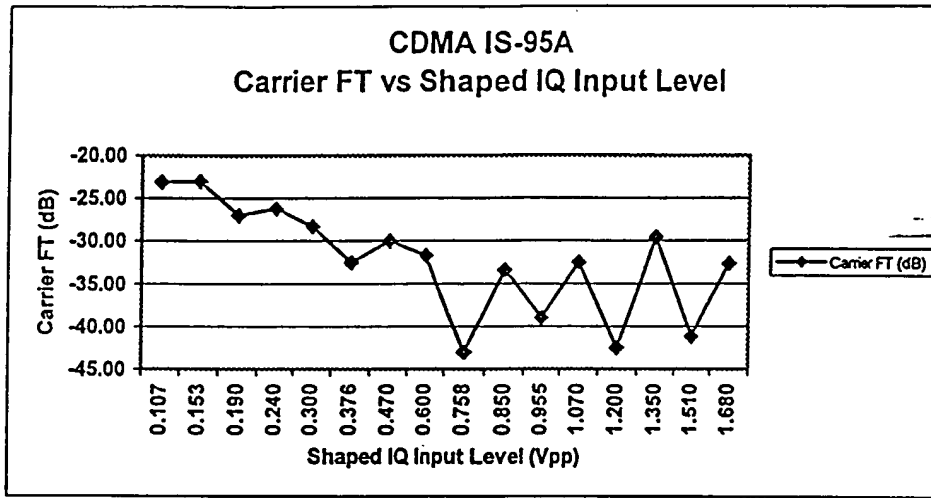


FIG. 52M

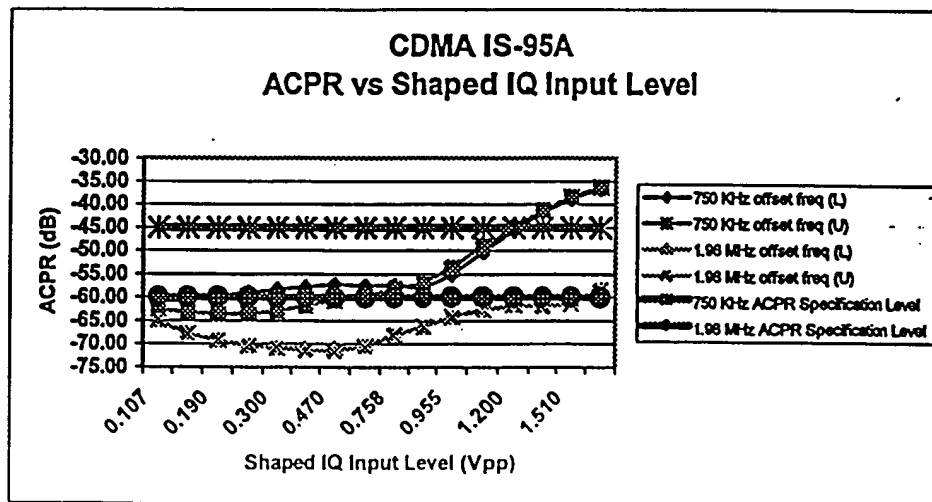


FIG. 52N

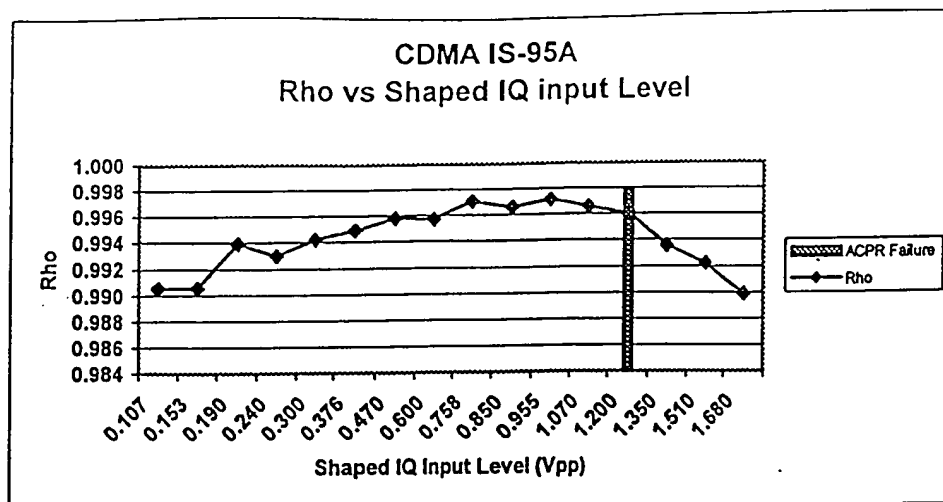
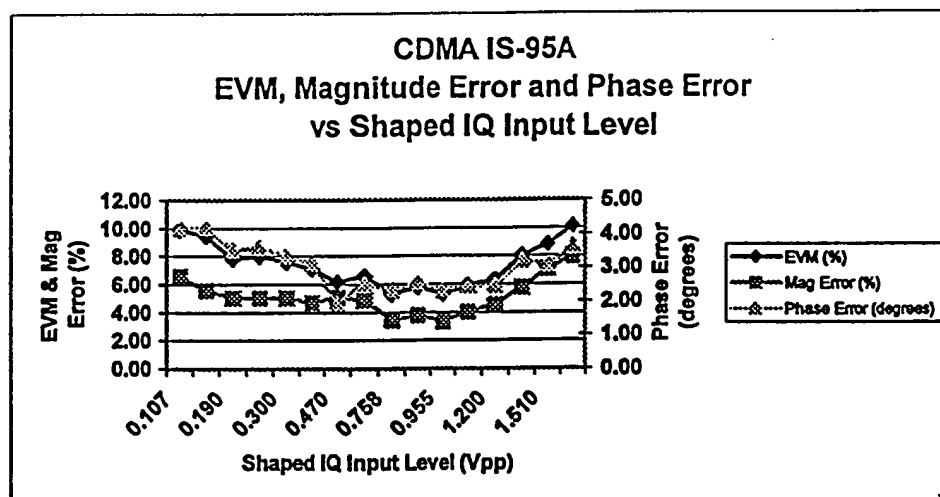


FIG 52O



Sequence for IQ Input Level Variance

FIG. 52P

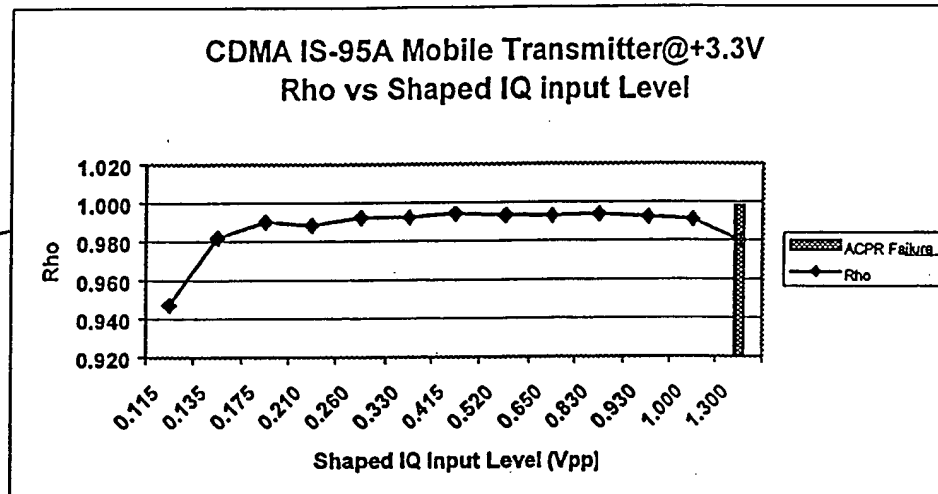
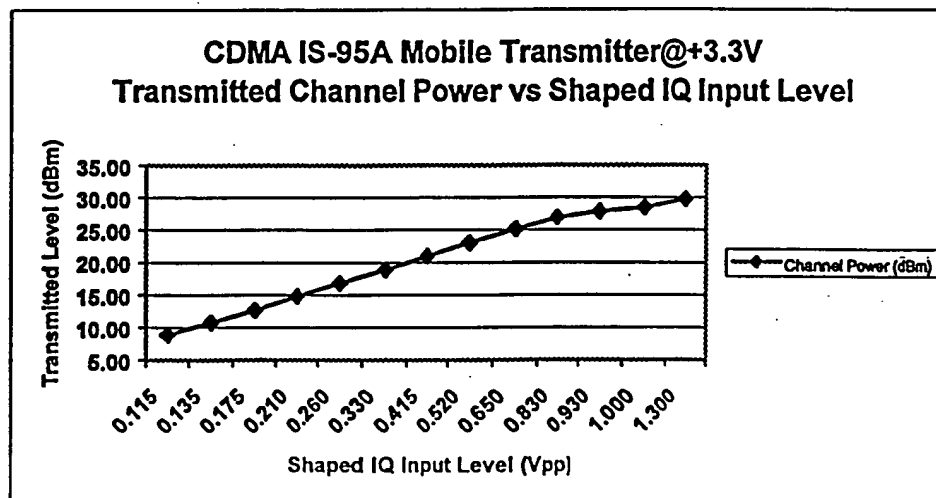
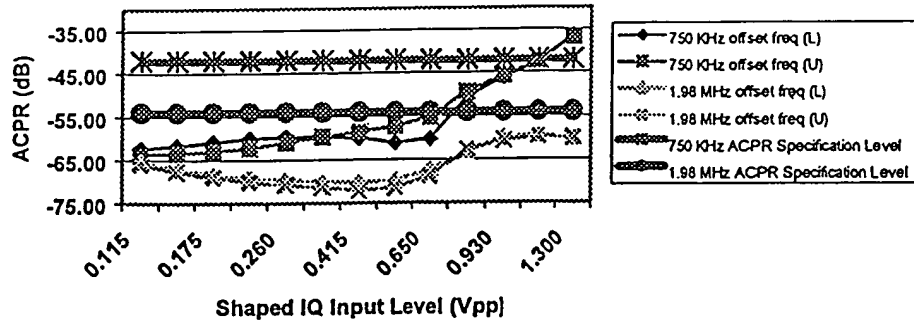


FIG. 52Q



CDMA IS-95A Mobile Transmitter@+3.3V
ACPR vs Shaped IQ Input Level



CDMA IS-95A Mobile Transmitter@+3.3V
EVM, Magnitude Error and Phase Error
vs Shaped IQ Input Level

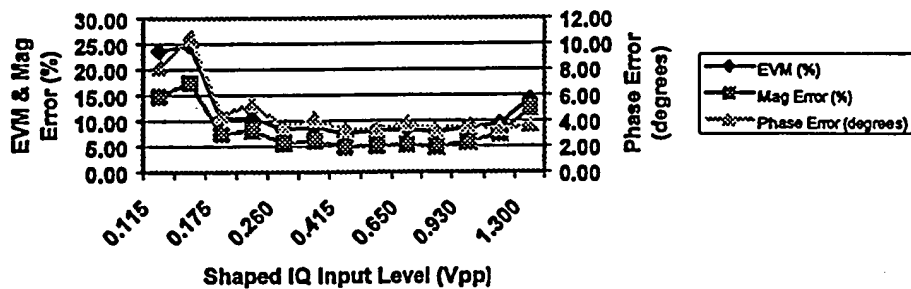


FIG. 52T

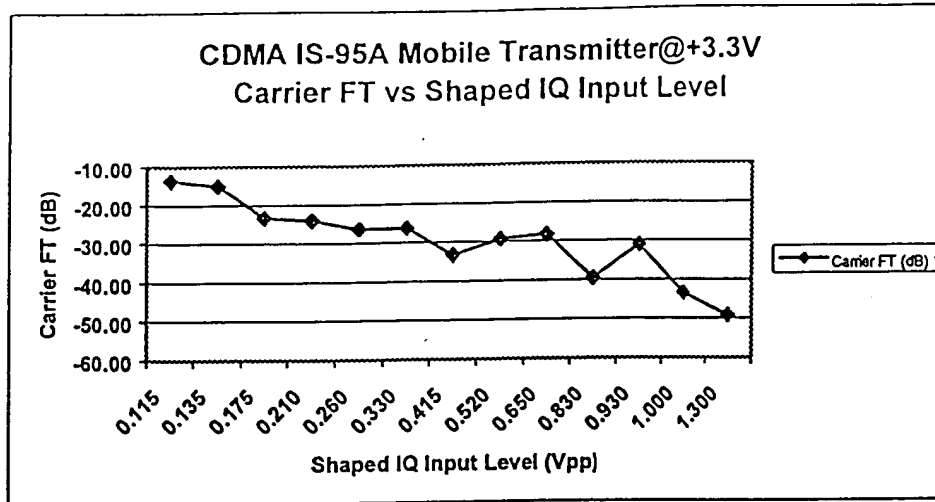


Figure 3.6-5

Sequence for LO Variance

FIG. 52U

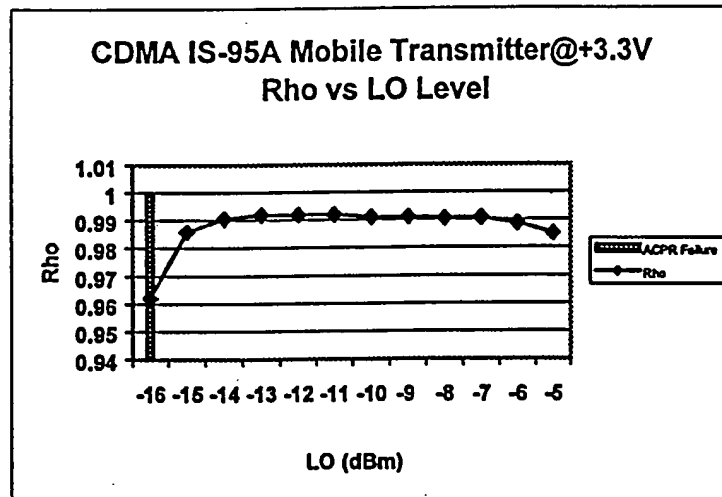


Figure 3.6-6

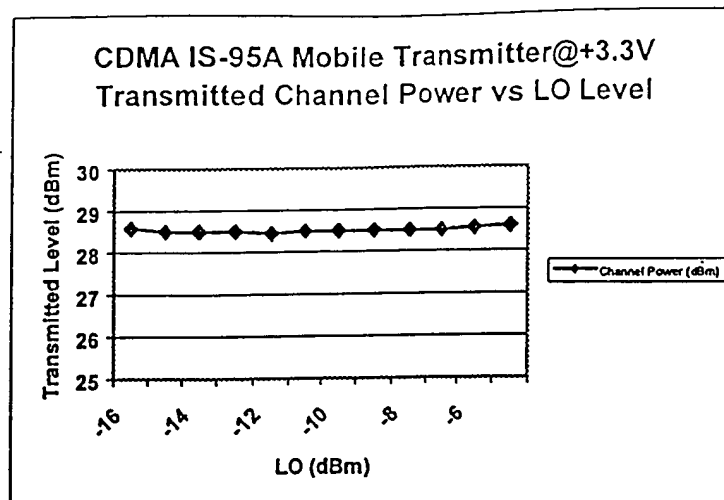
[illegible]

FIG. 52W

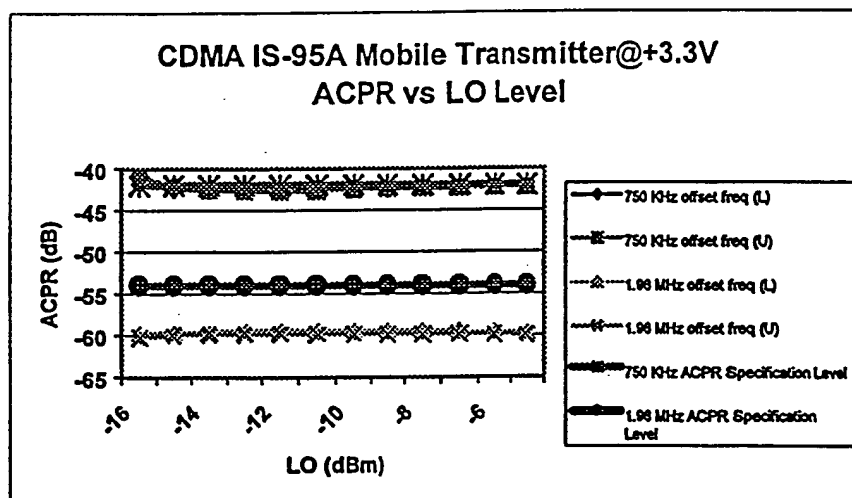


FIG. 52X

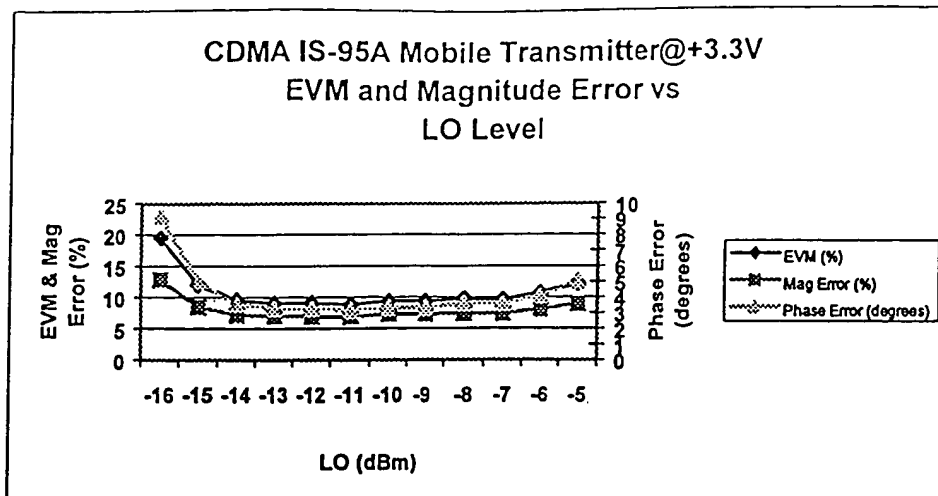
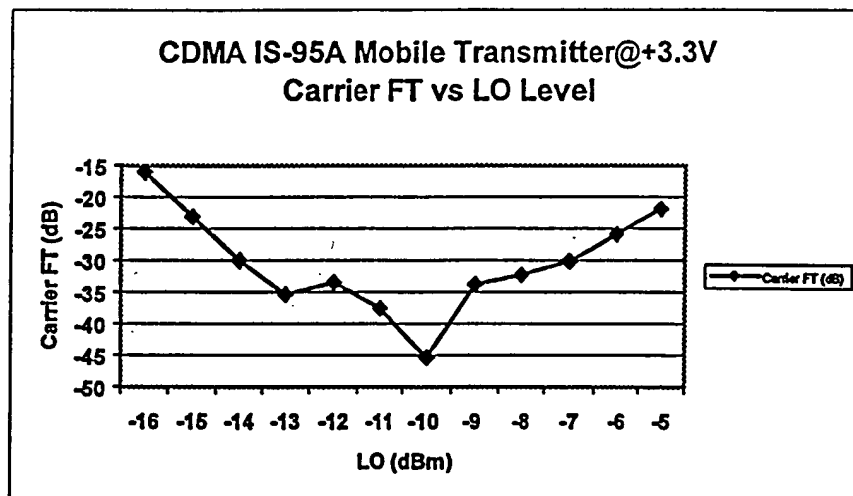


FIG. 52Y



<i>Quantity</i>	<i>Description</i>	<i>Voltage</i>	<i>Total Current</i>	<i>Power</i>
2	Cores	3.3	4mA	13.2mW
2	Baseband Interface Circuits with/BW Limit	3.3	6mA	21.8mW
1	Clock Circuit	3.3	5mA	20.0mW
			<i>Sub Total</i>	54.0mW

FIG. 522

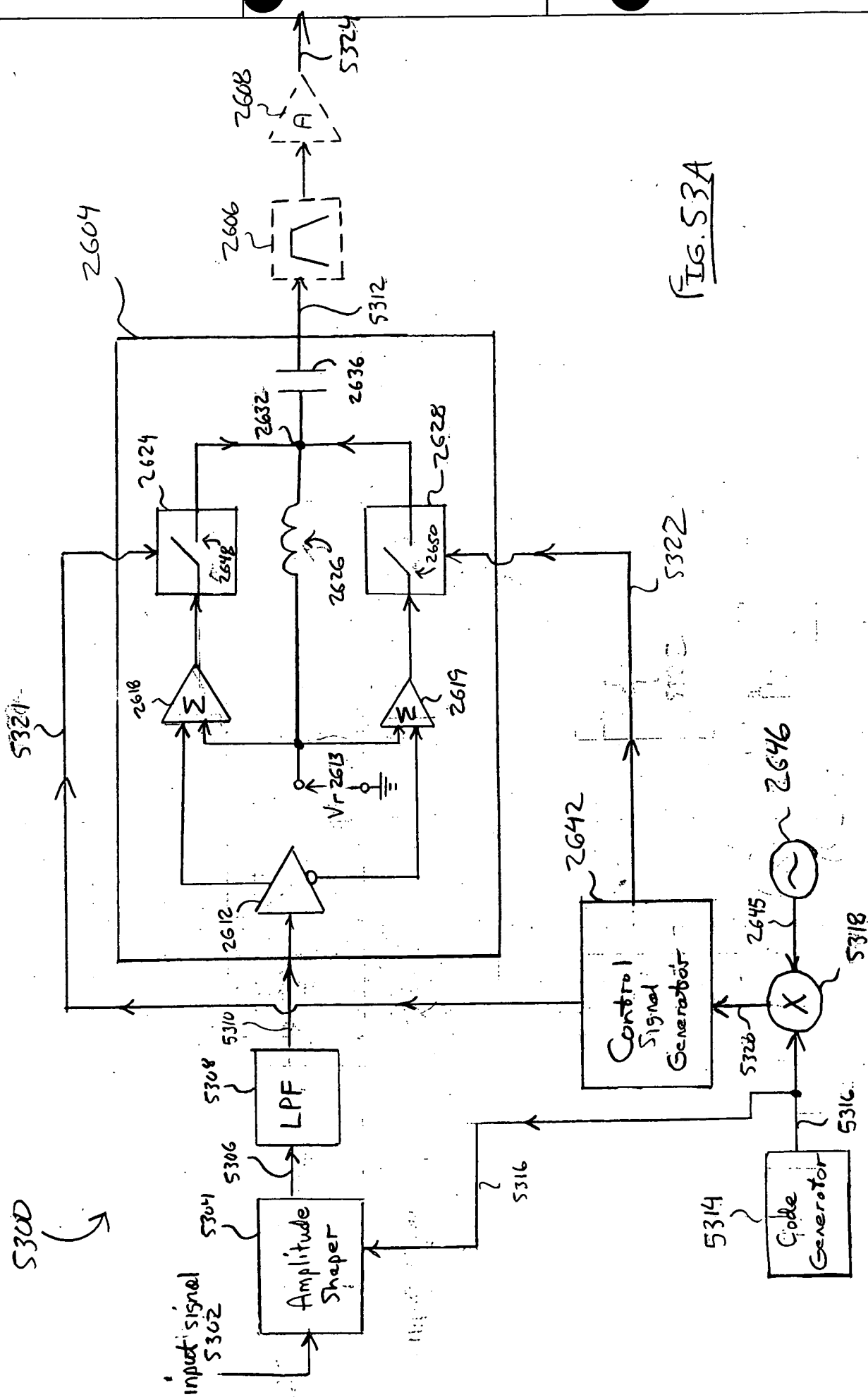


Fig. 53A

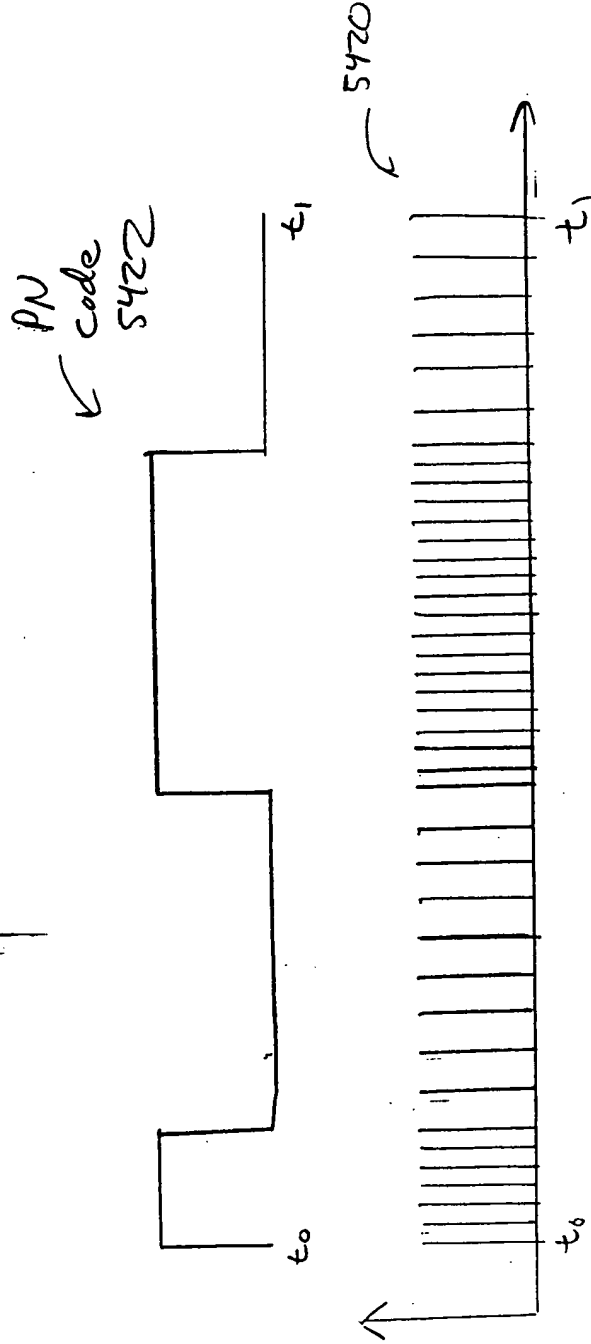


FIG. 54B

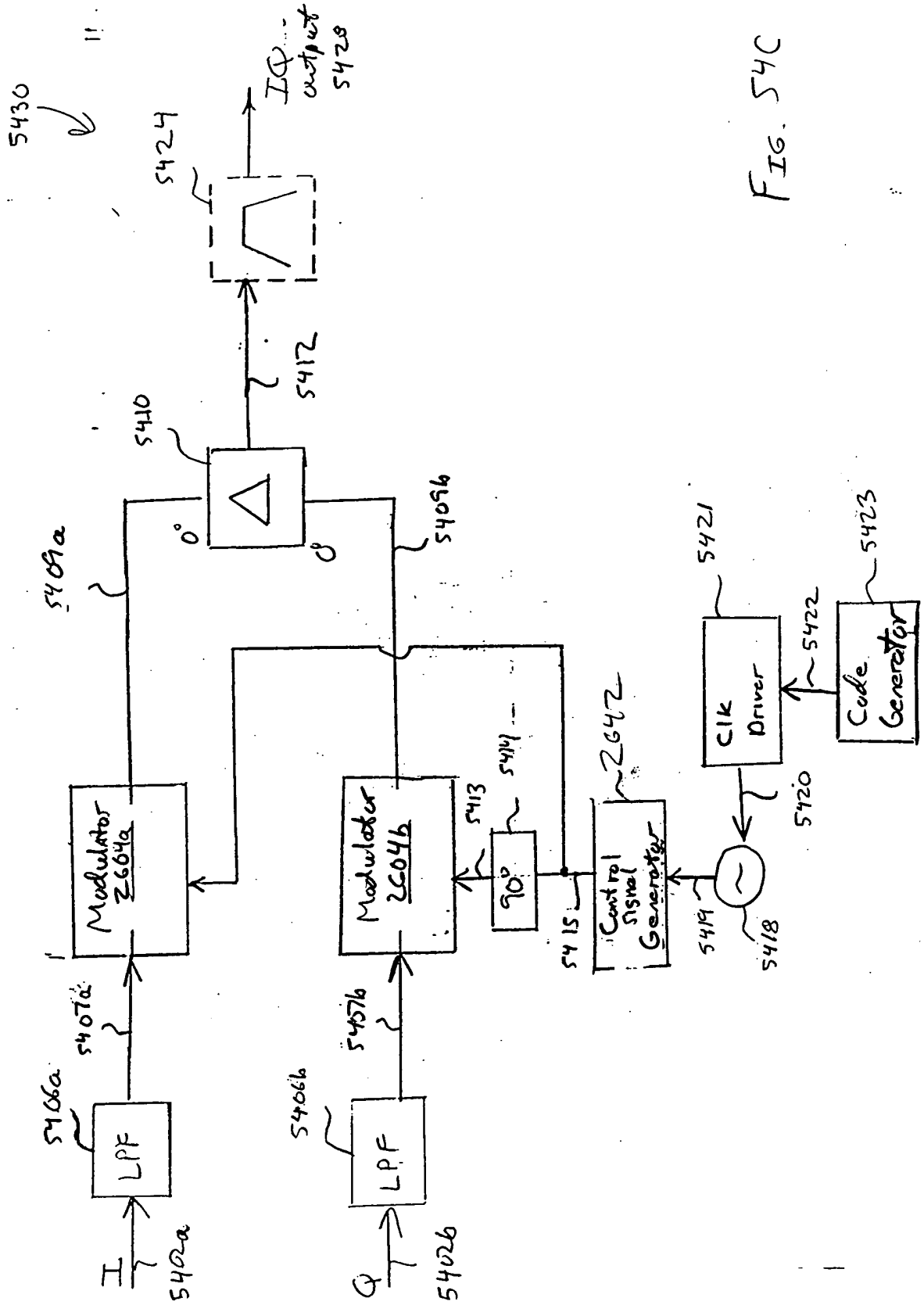
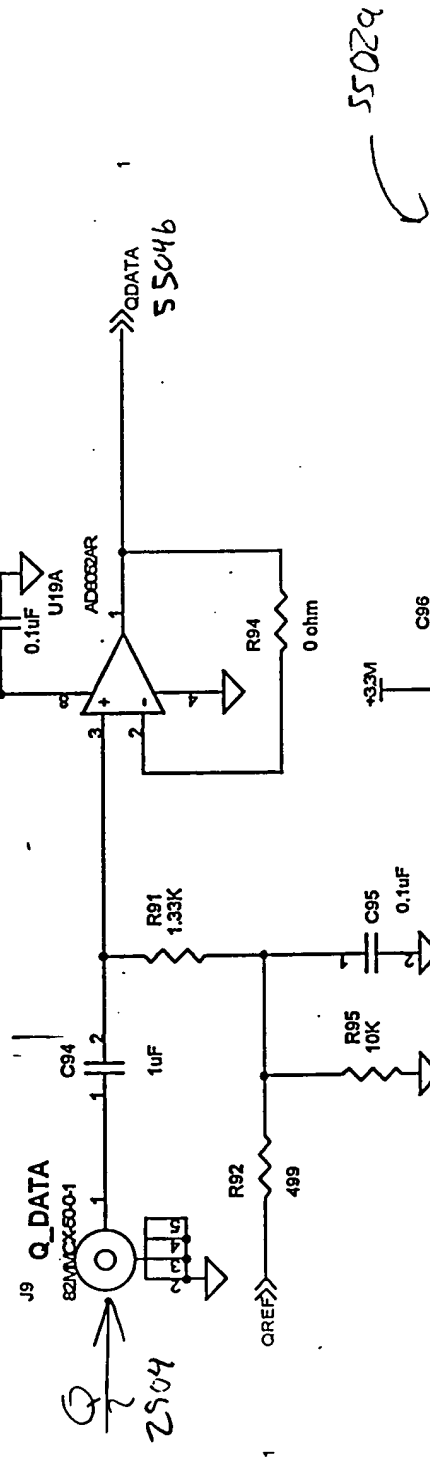


FIG. 54C

55026



55029

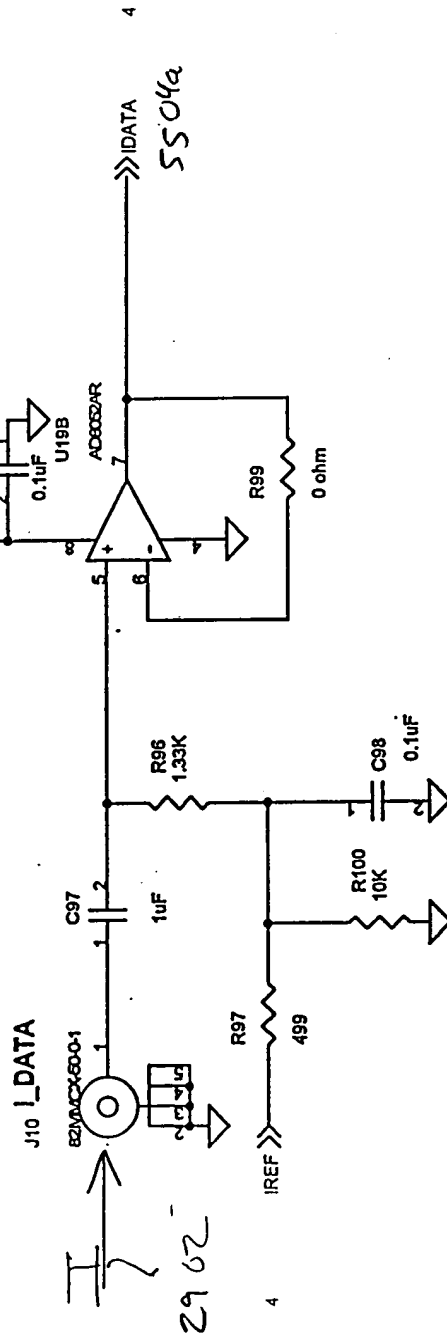
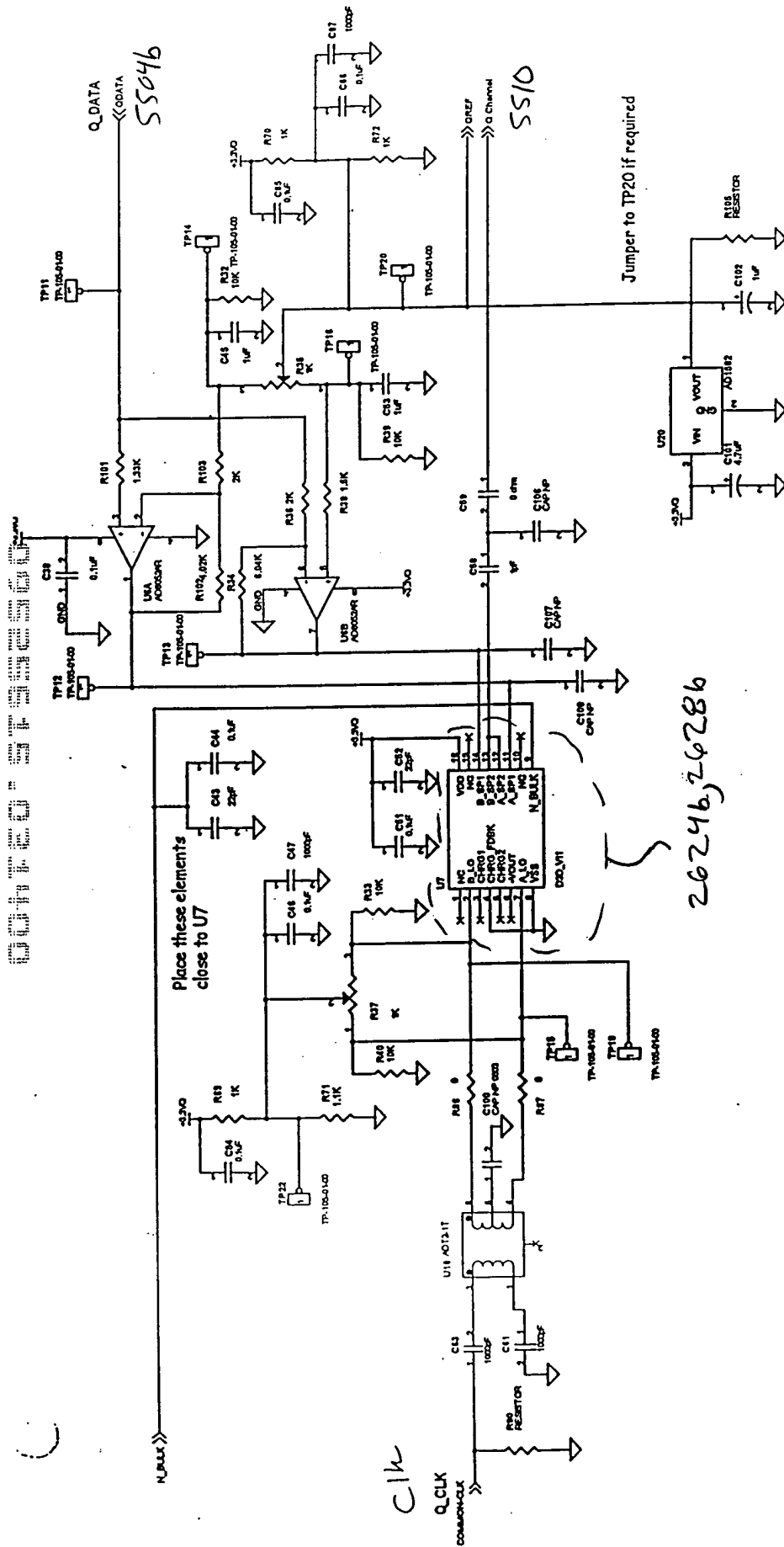


FIG. 55A

.)



5508
G Channel

F.T.6. SSC

2055

26246, 26286

•

[illegible]

G Channel

2055

F.T.6. SSC

2055

26246, 26286

•

[illegible]

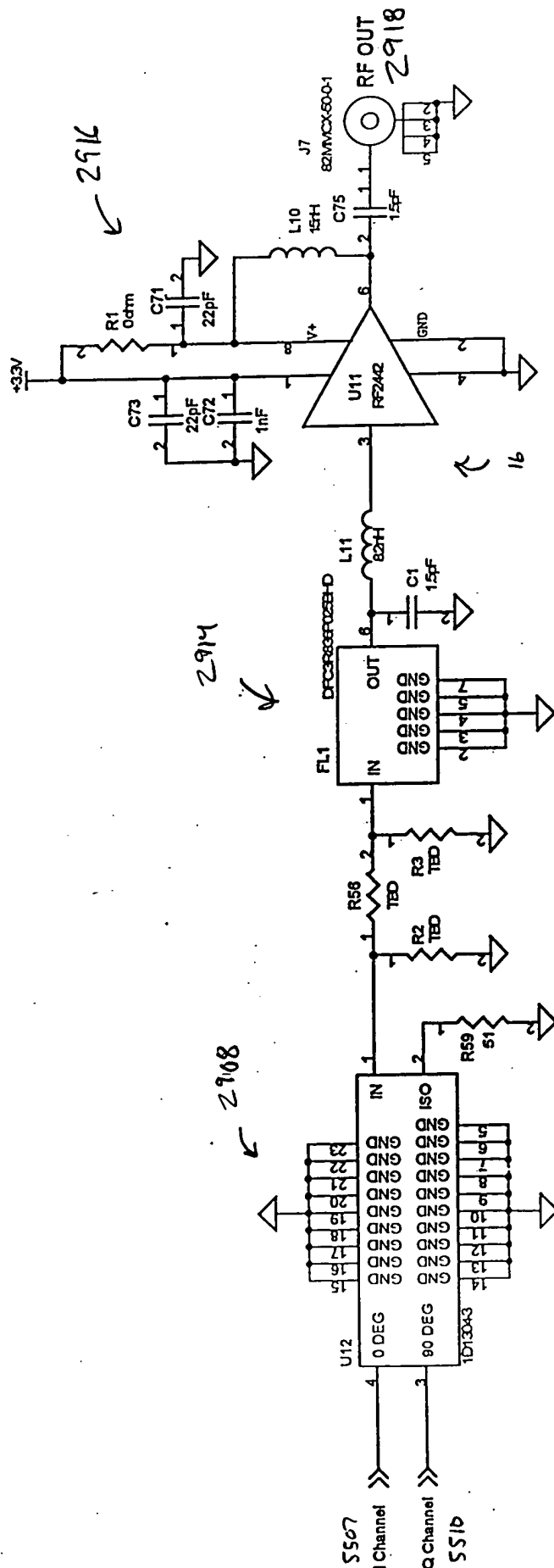
[illegible]

Fig. 550

Combiner
5512

S600

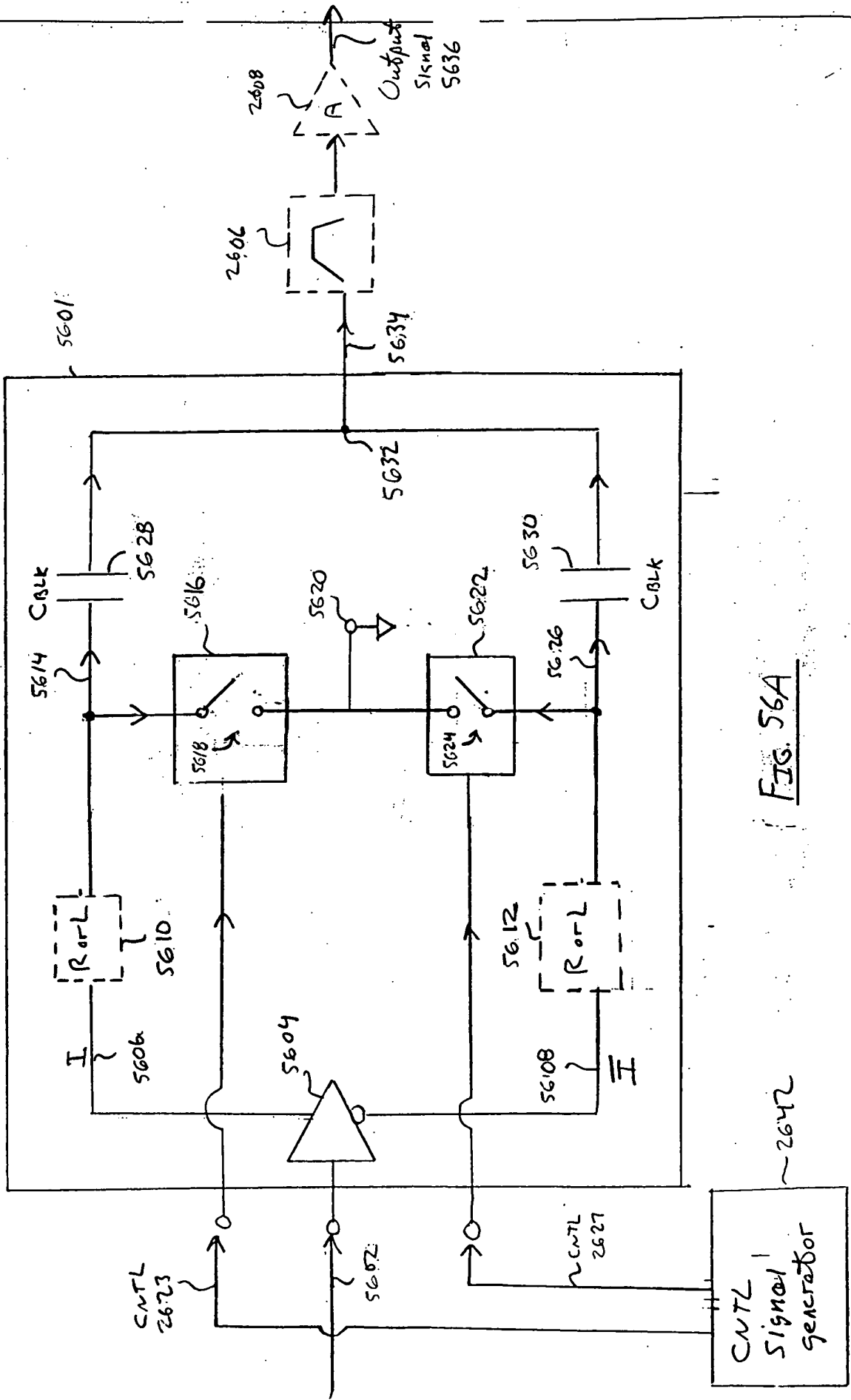


FIG. 56A

5600

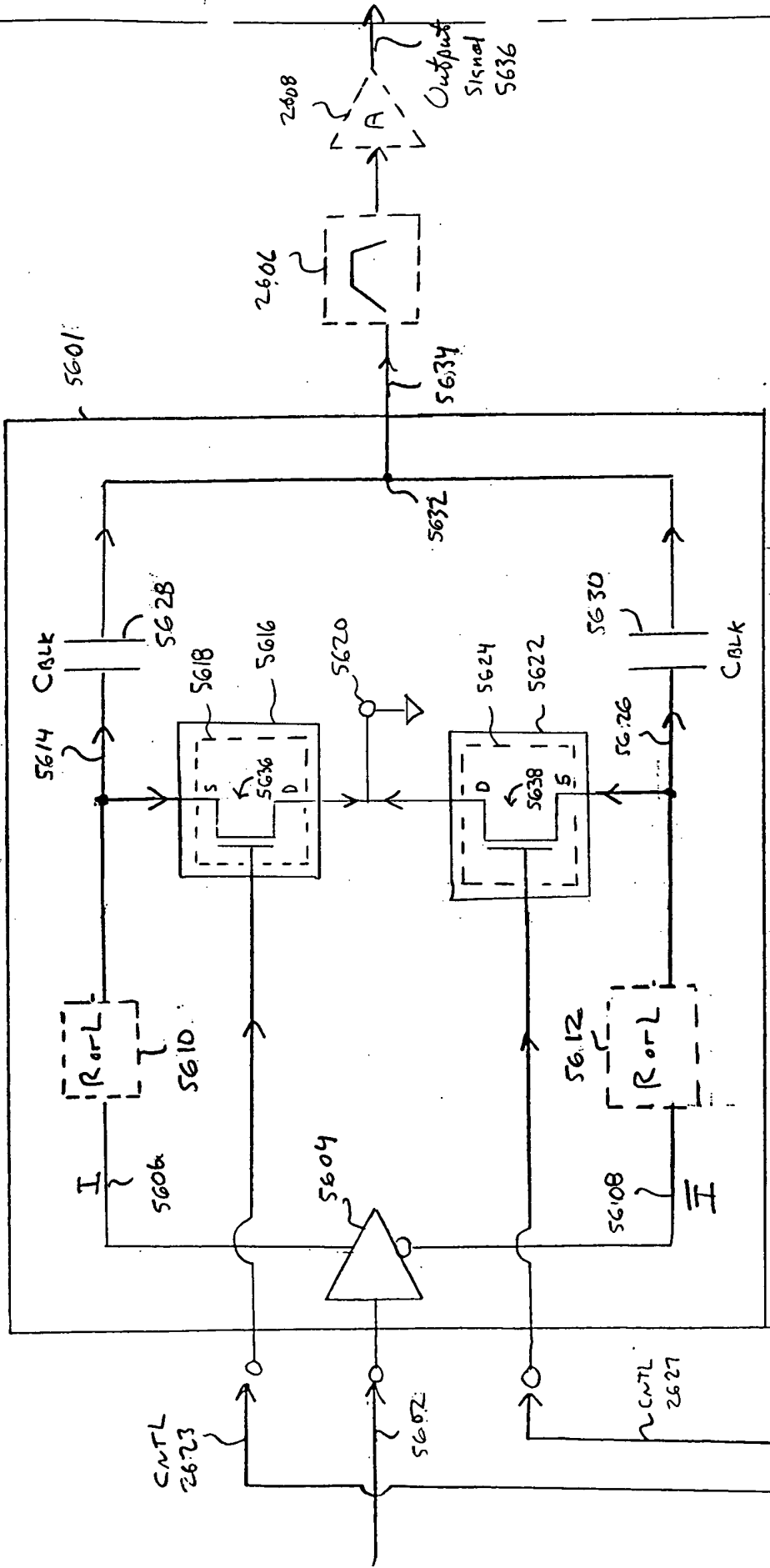
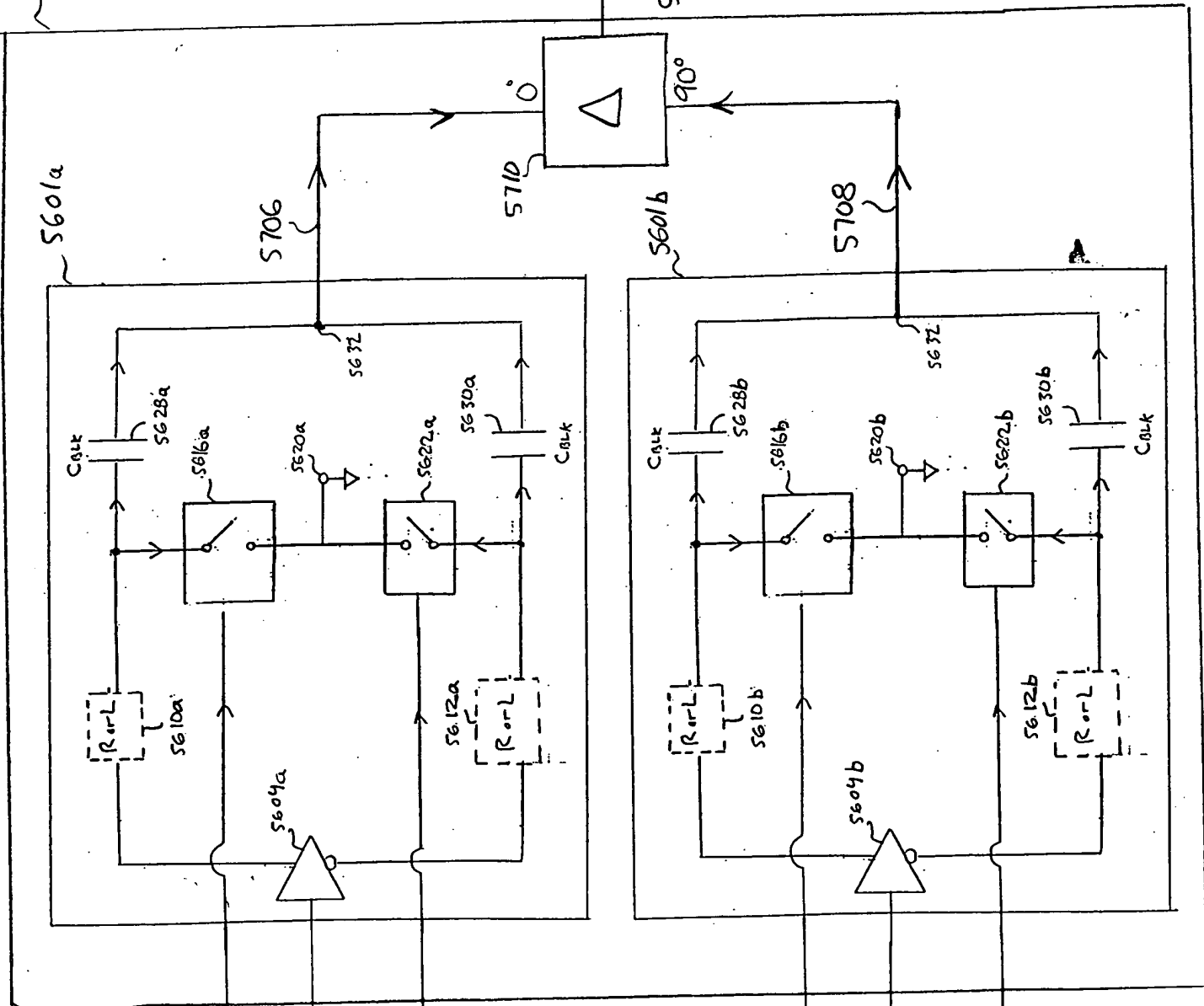


Fig. 56D

DATA BUS

5700

5701



CNTL 2623

I baseband 5702

CNTL 2627

CNTL 2623

Q baseband 5704

CNTL 2627

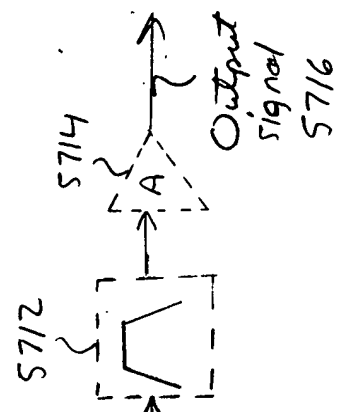


FIG. 57

5900

5902

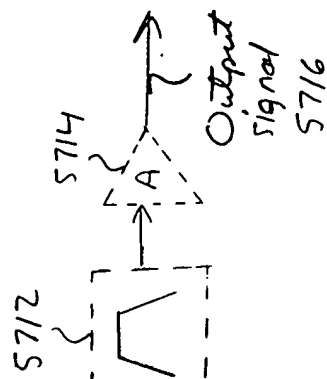
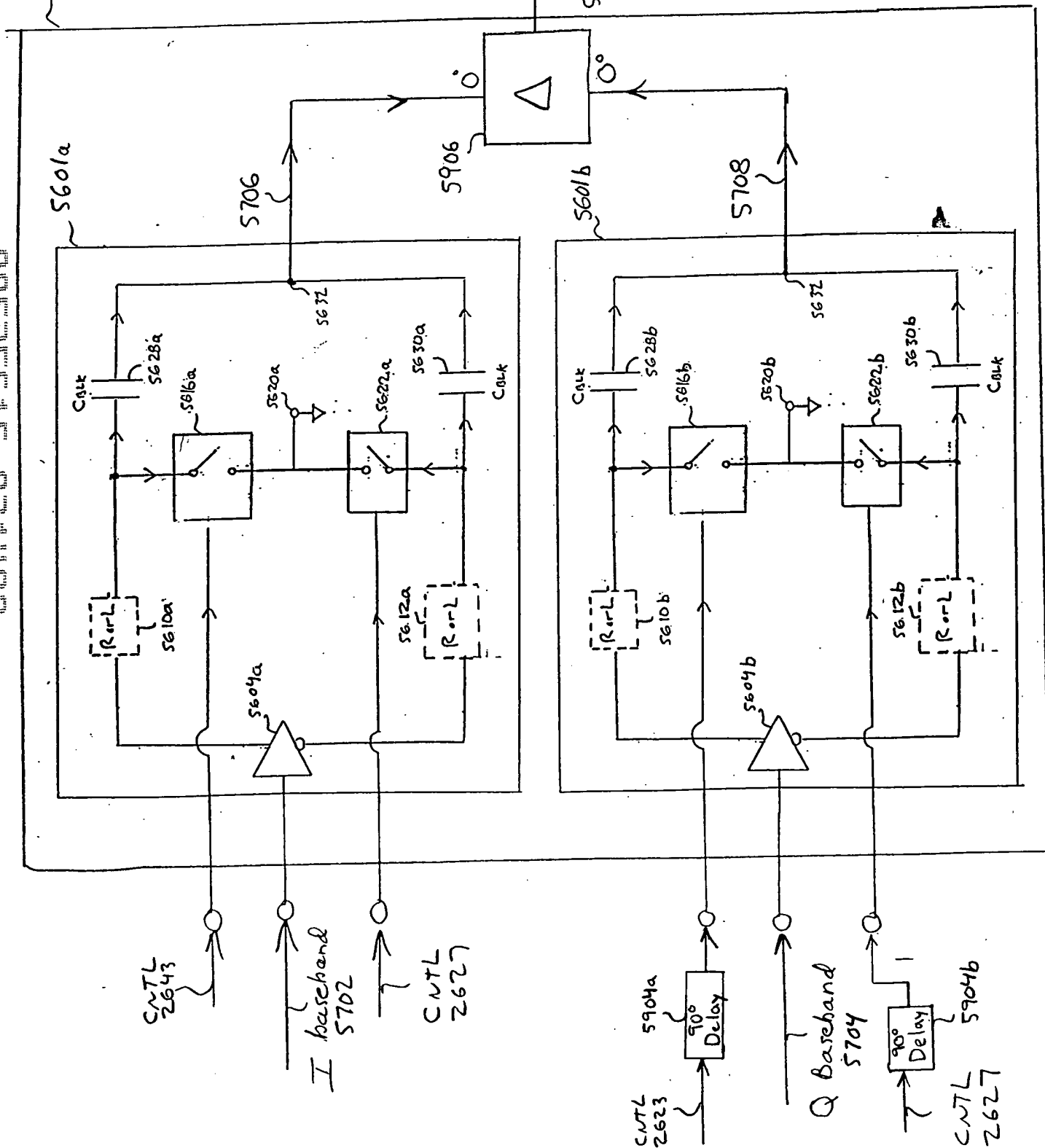


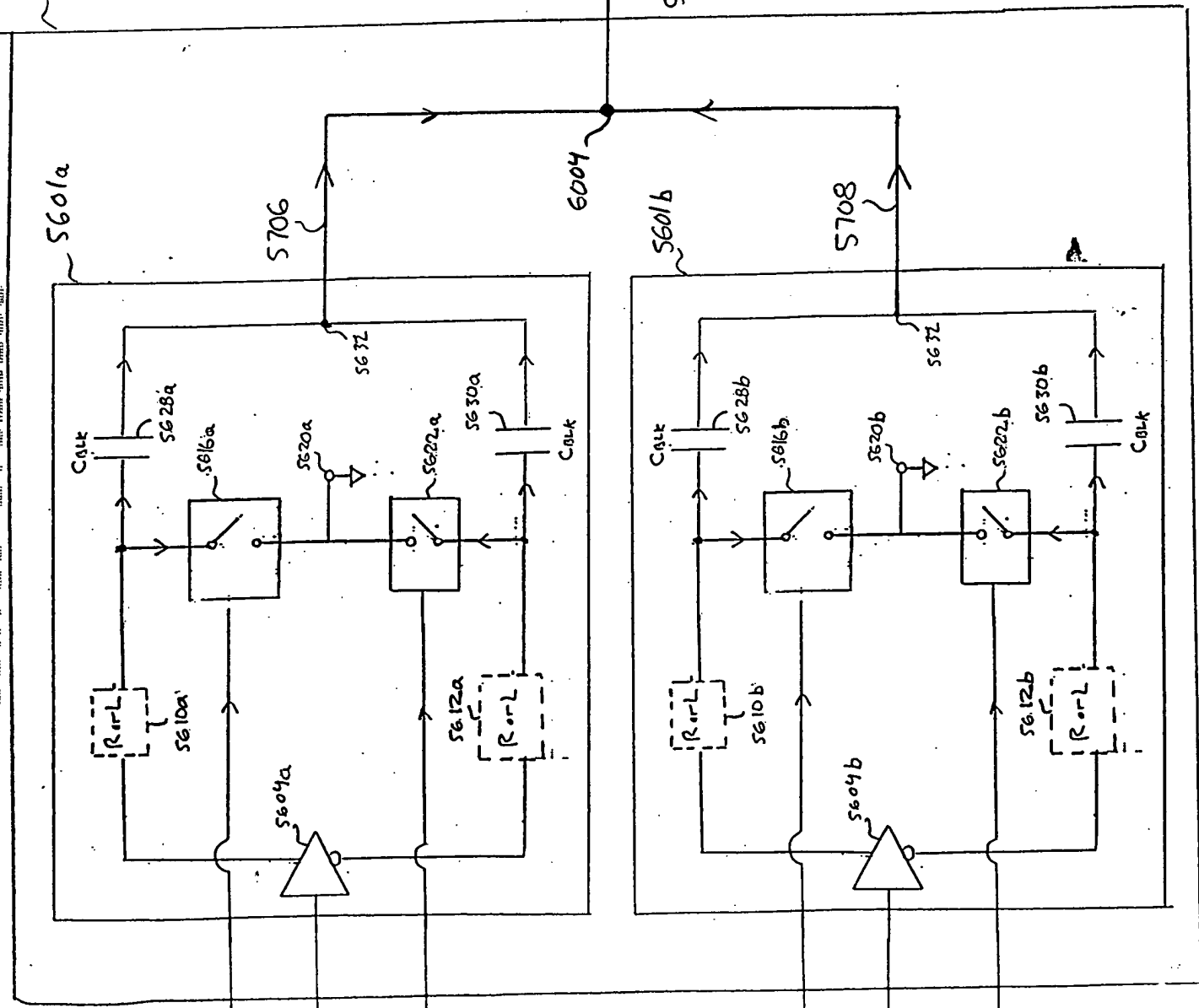
FIG. 59



DATA BUS

6000

6002



Output signal 5716

FIG. 60

CNTL 2643

I baseband 5702

CNTL 2627

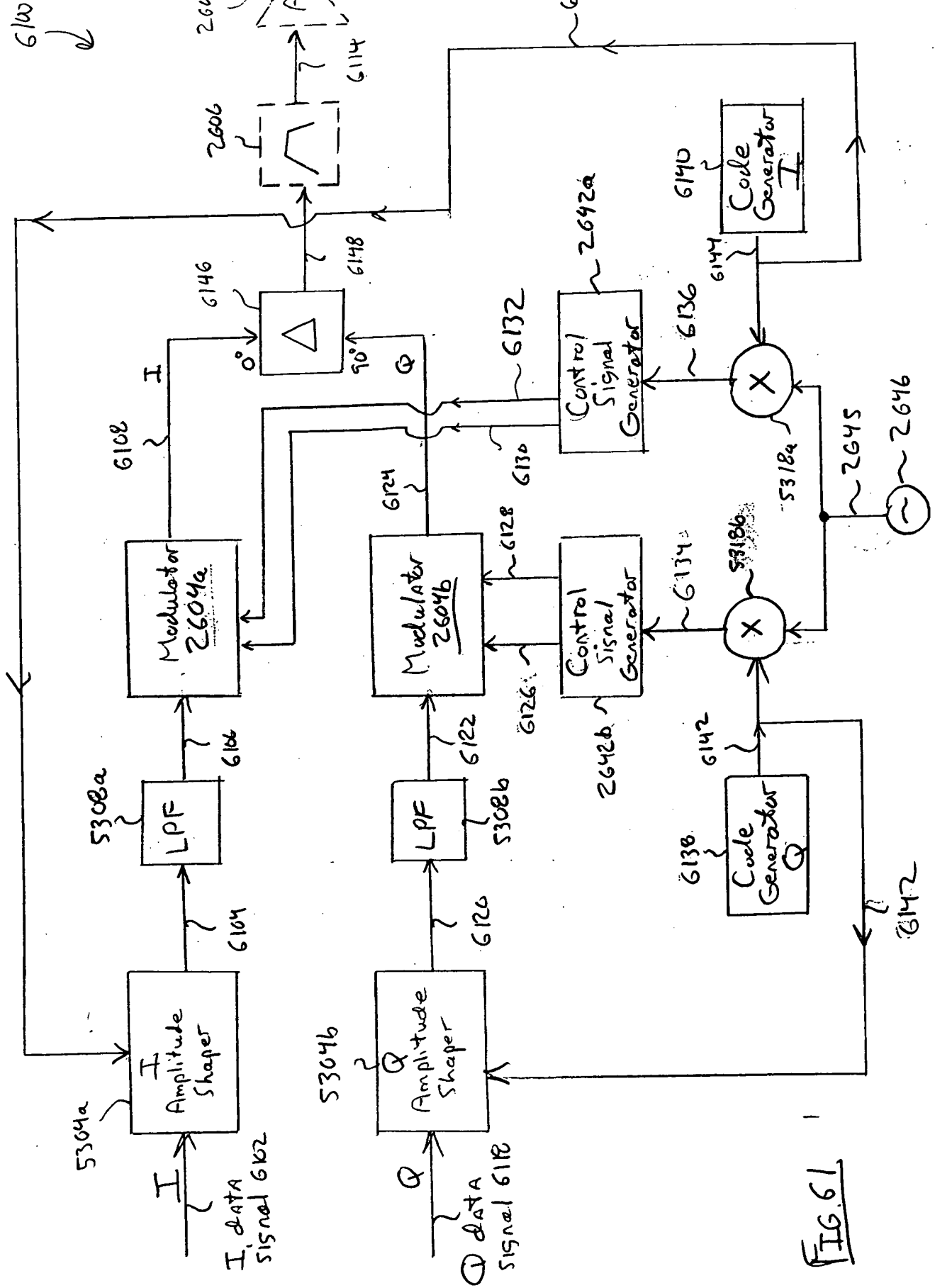
CNTL 2623

90° Delay

Q Baseband 5704

CNTL 2627

90° Delay



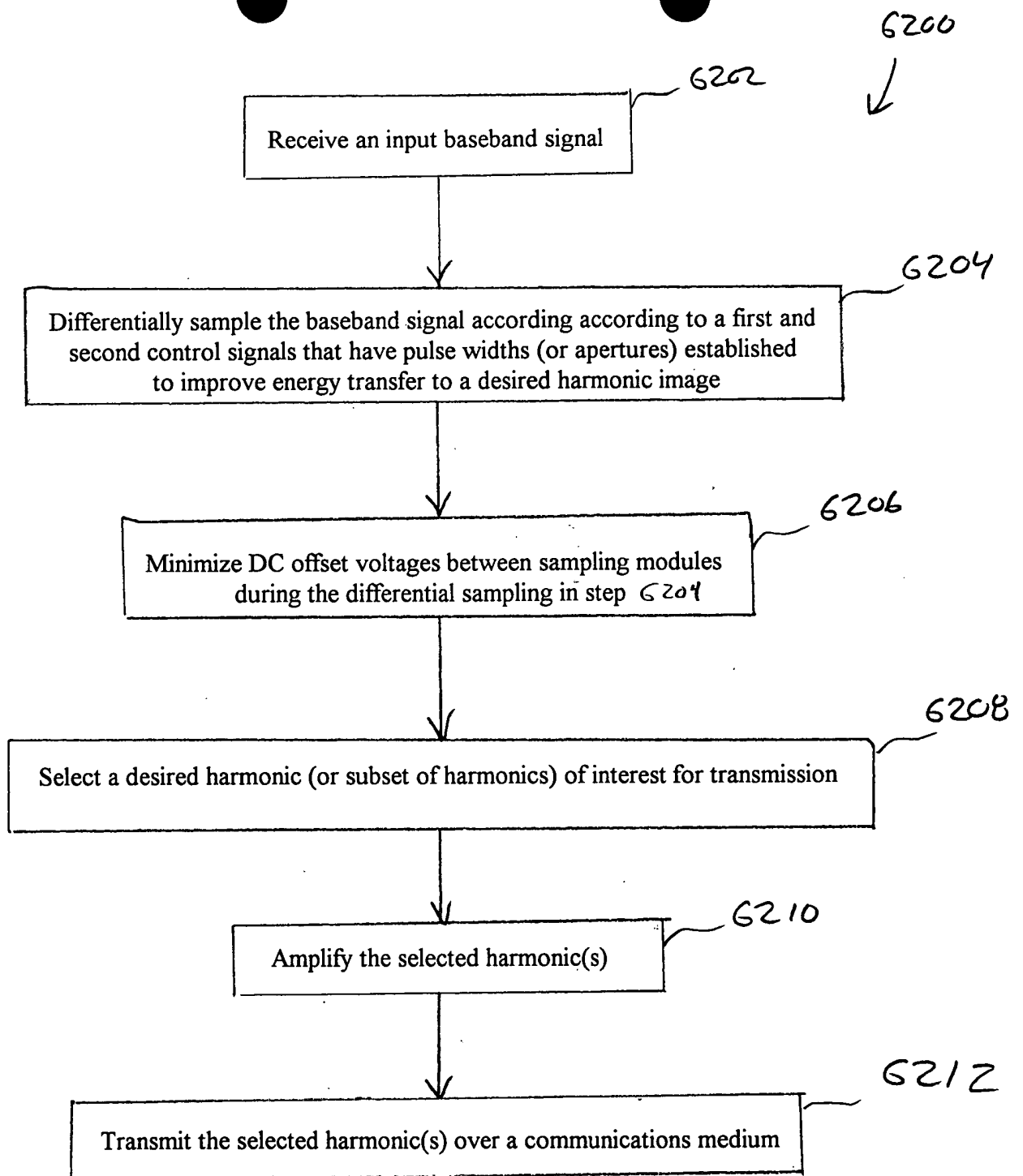


FIG. 62

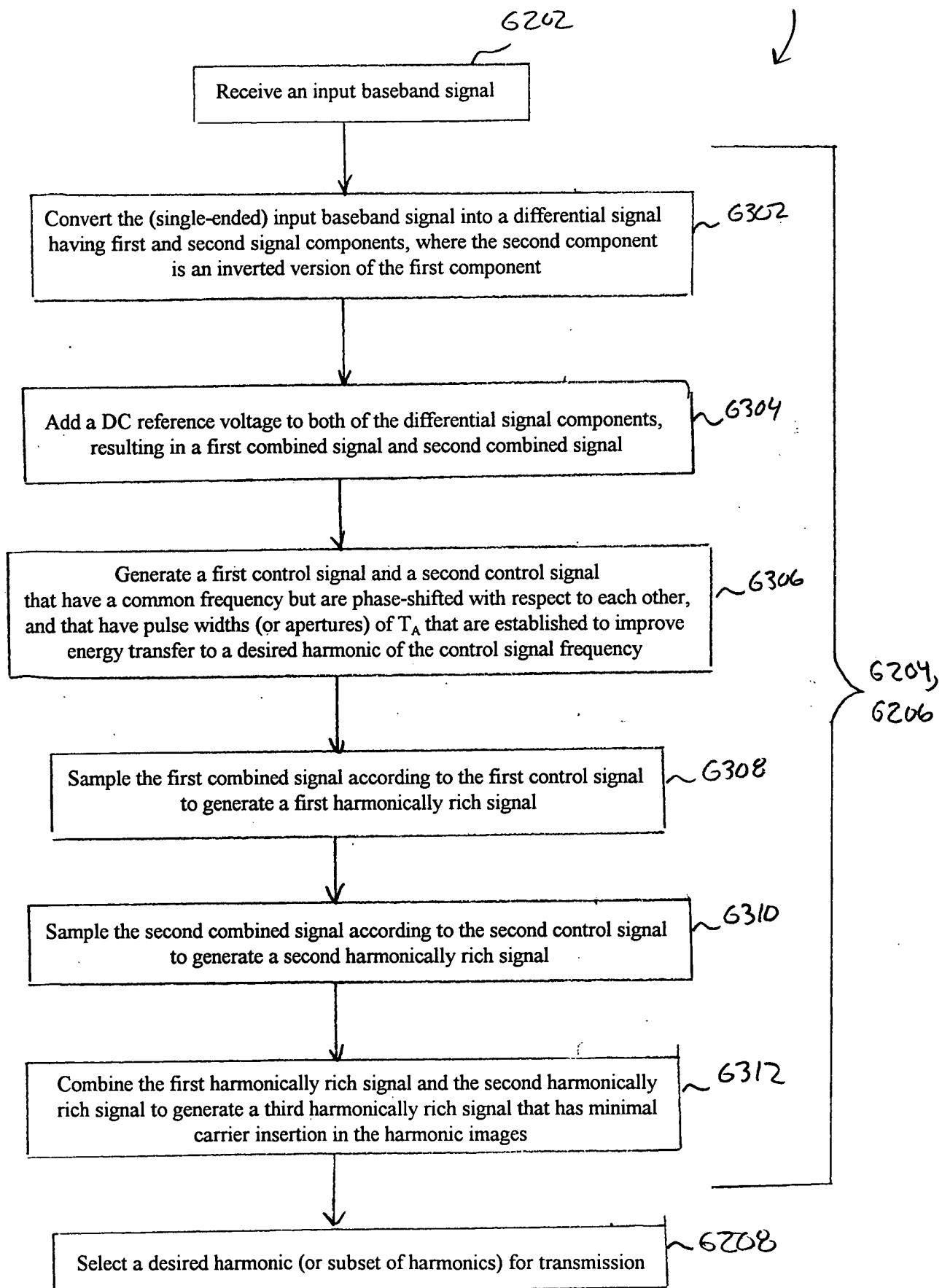


FIG. 63

6400
↓

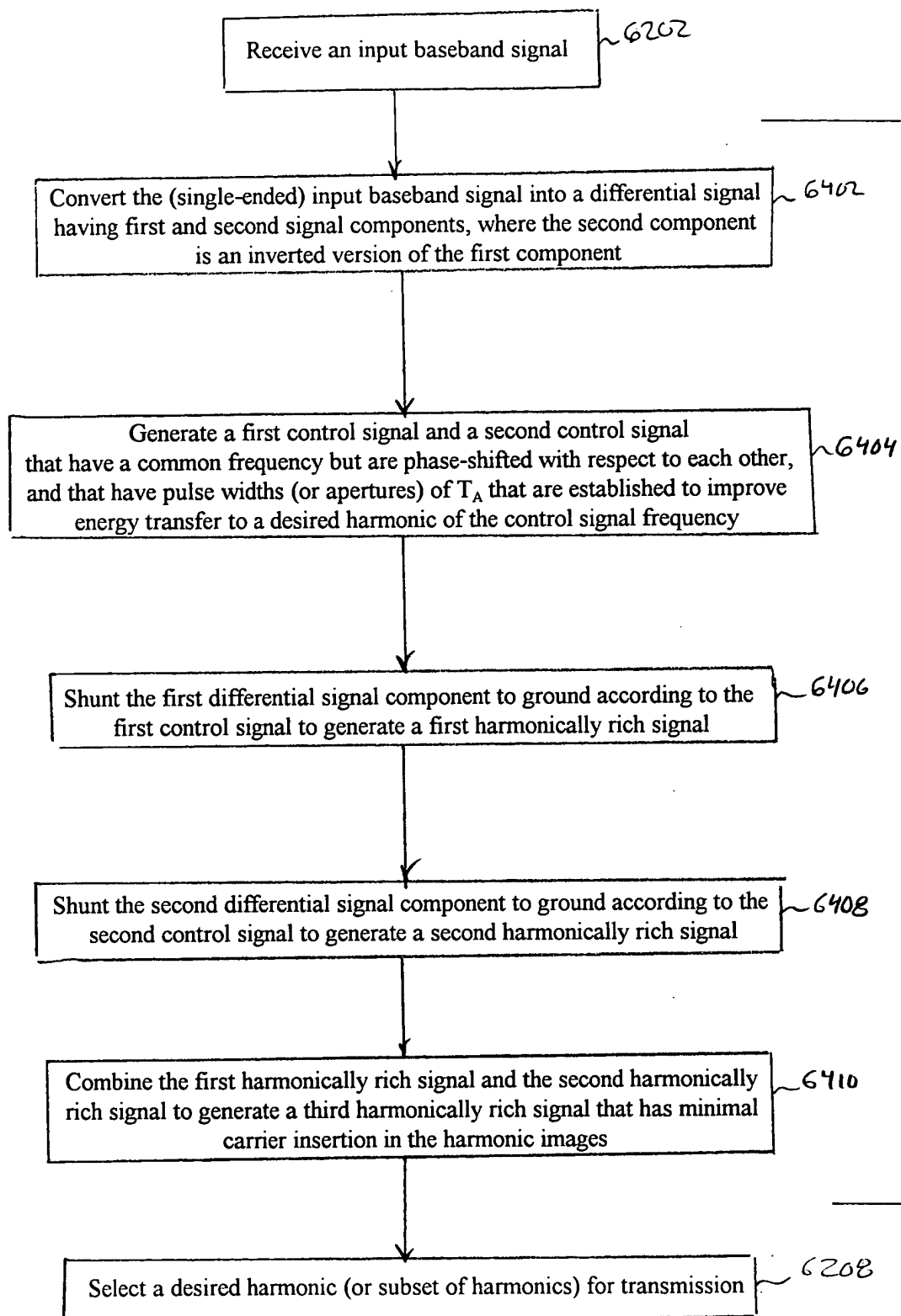


FIG. 64

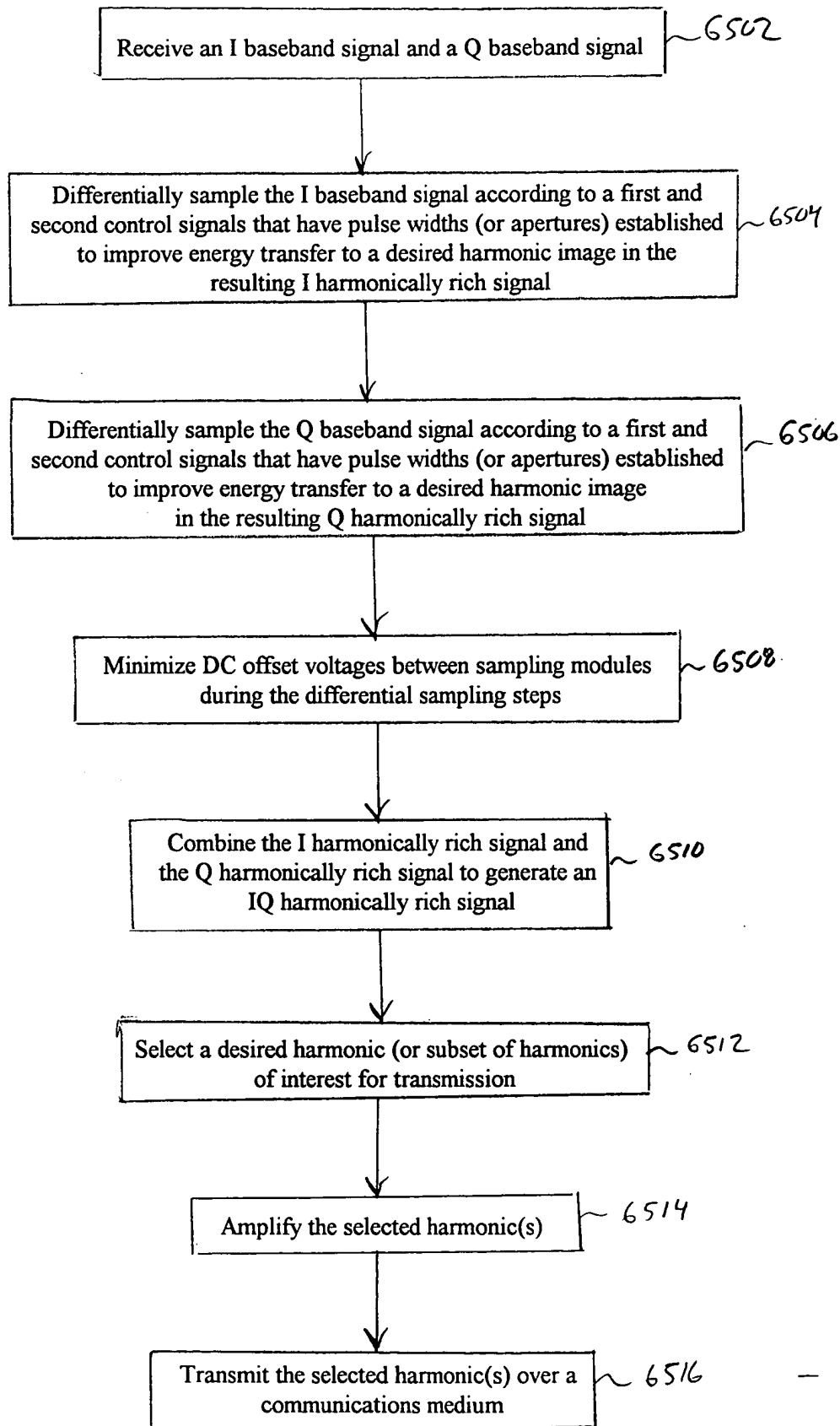


FIG. 65

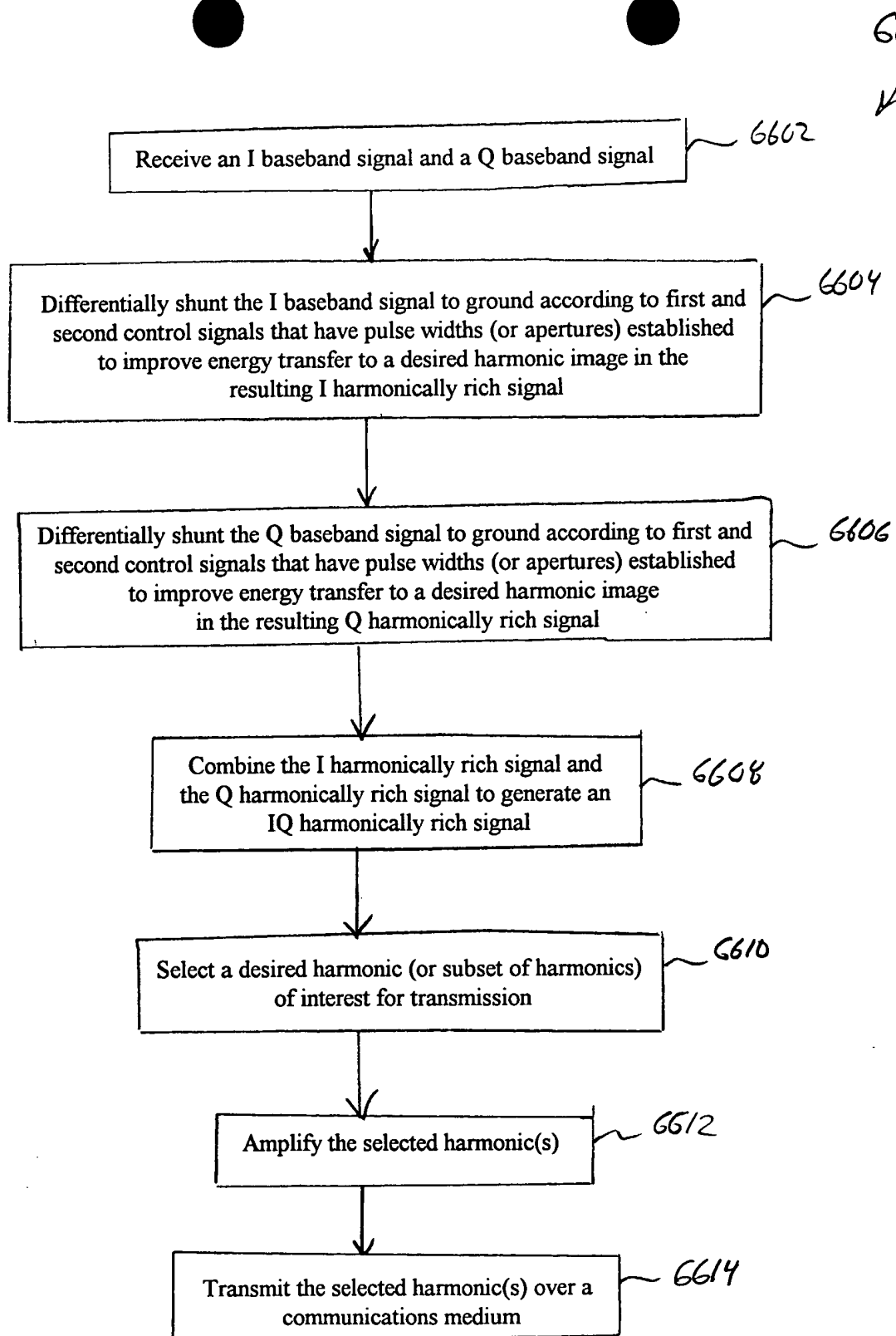
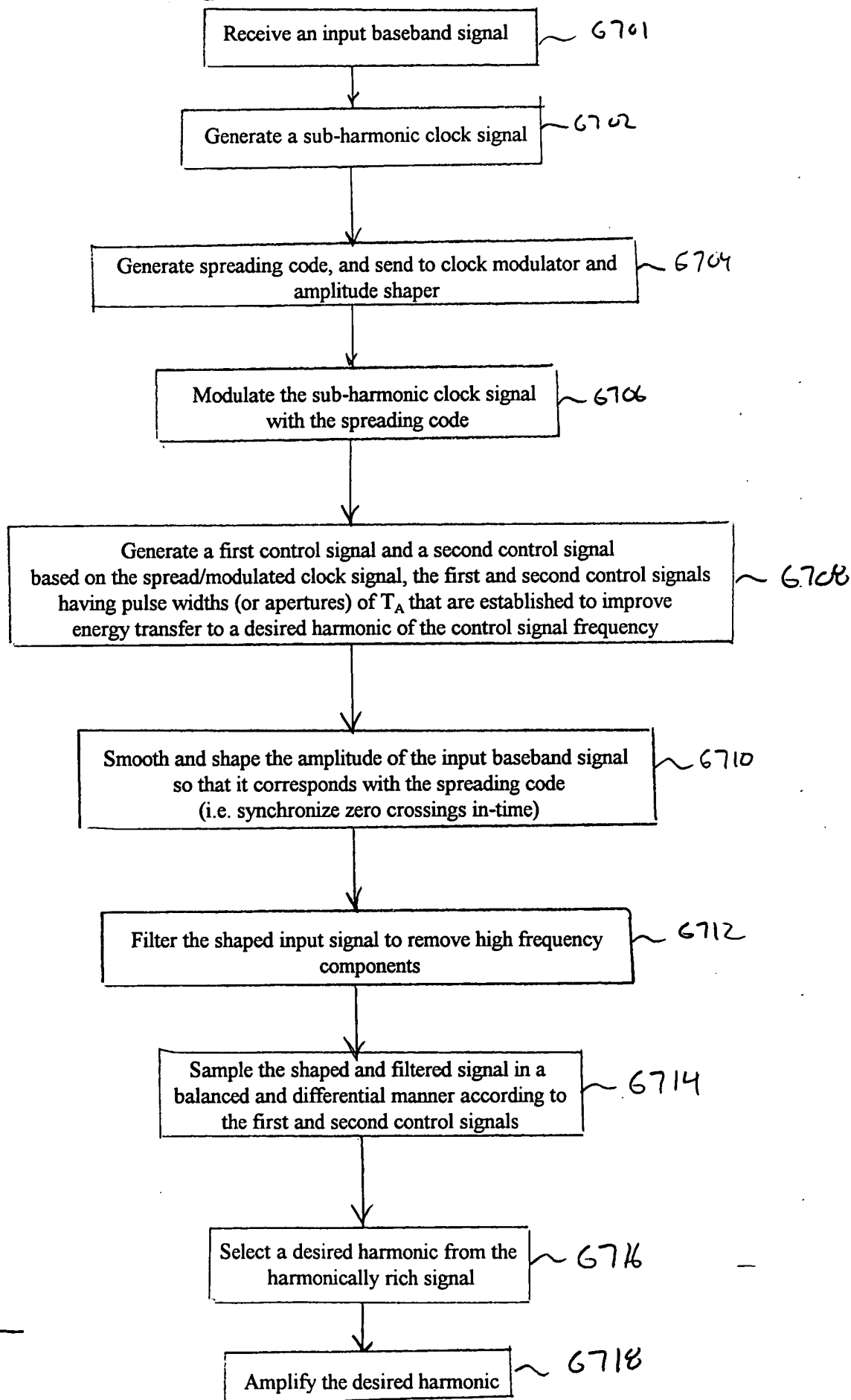


FIG. 66

6700
↓



6700 6701 6702 6704 6706 6708 6710 6712 6714 6716 6718

FIG. 67

6800
↓

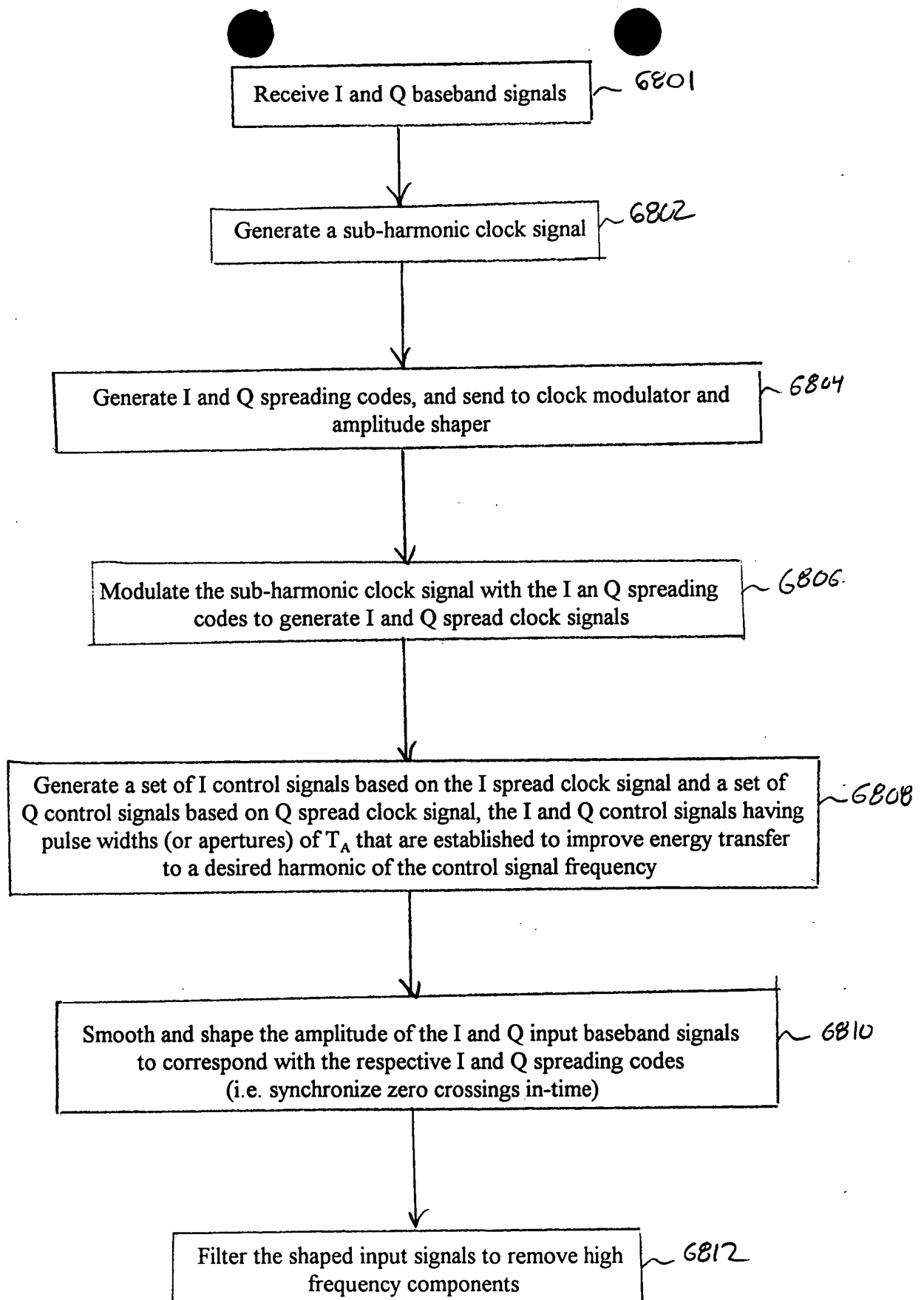
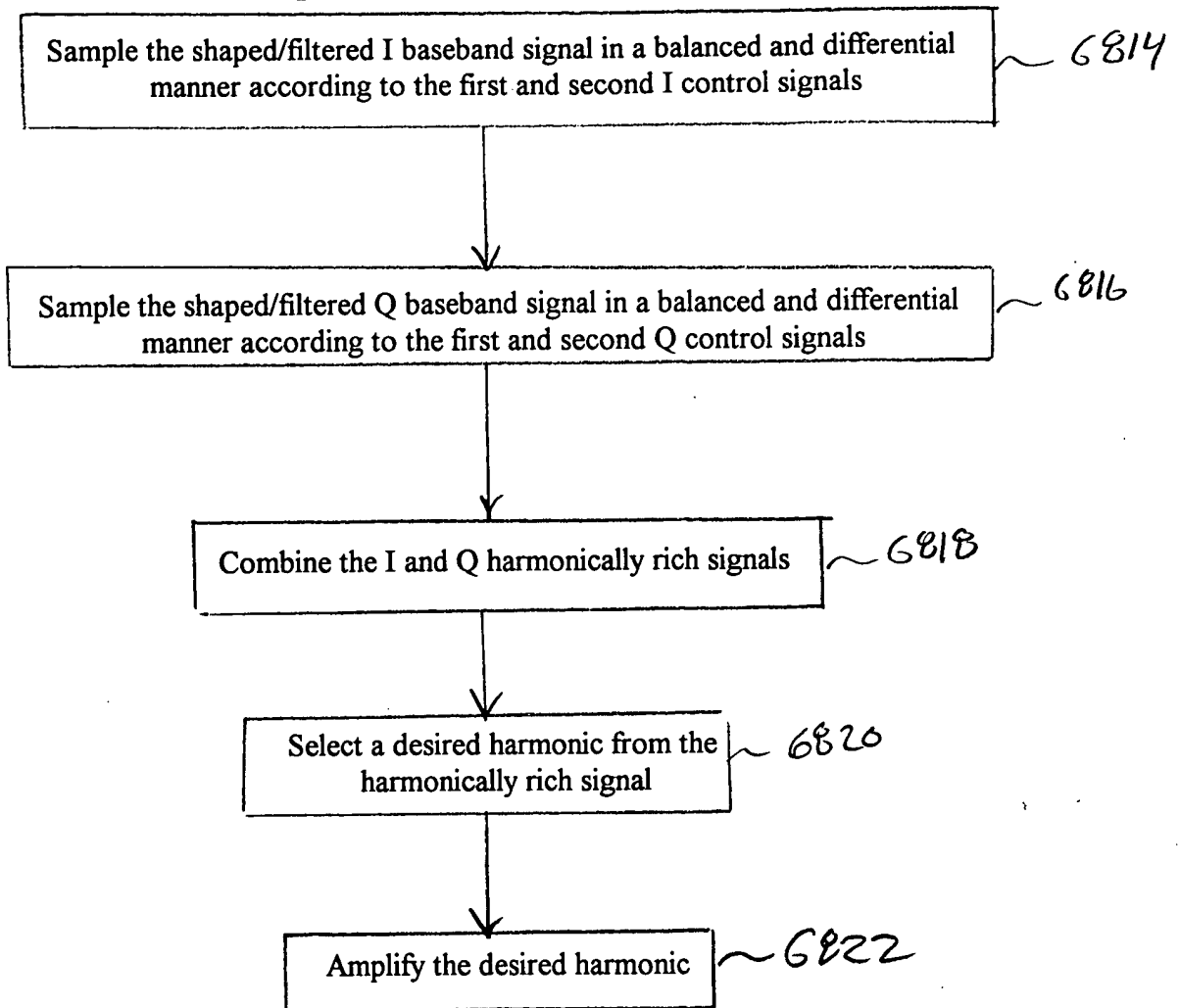


FIG. 680A

6810
(cont.)



6810 6812 6814 6816 6818 6820 6822

FIG. 68B

6900
↓

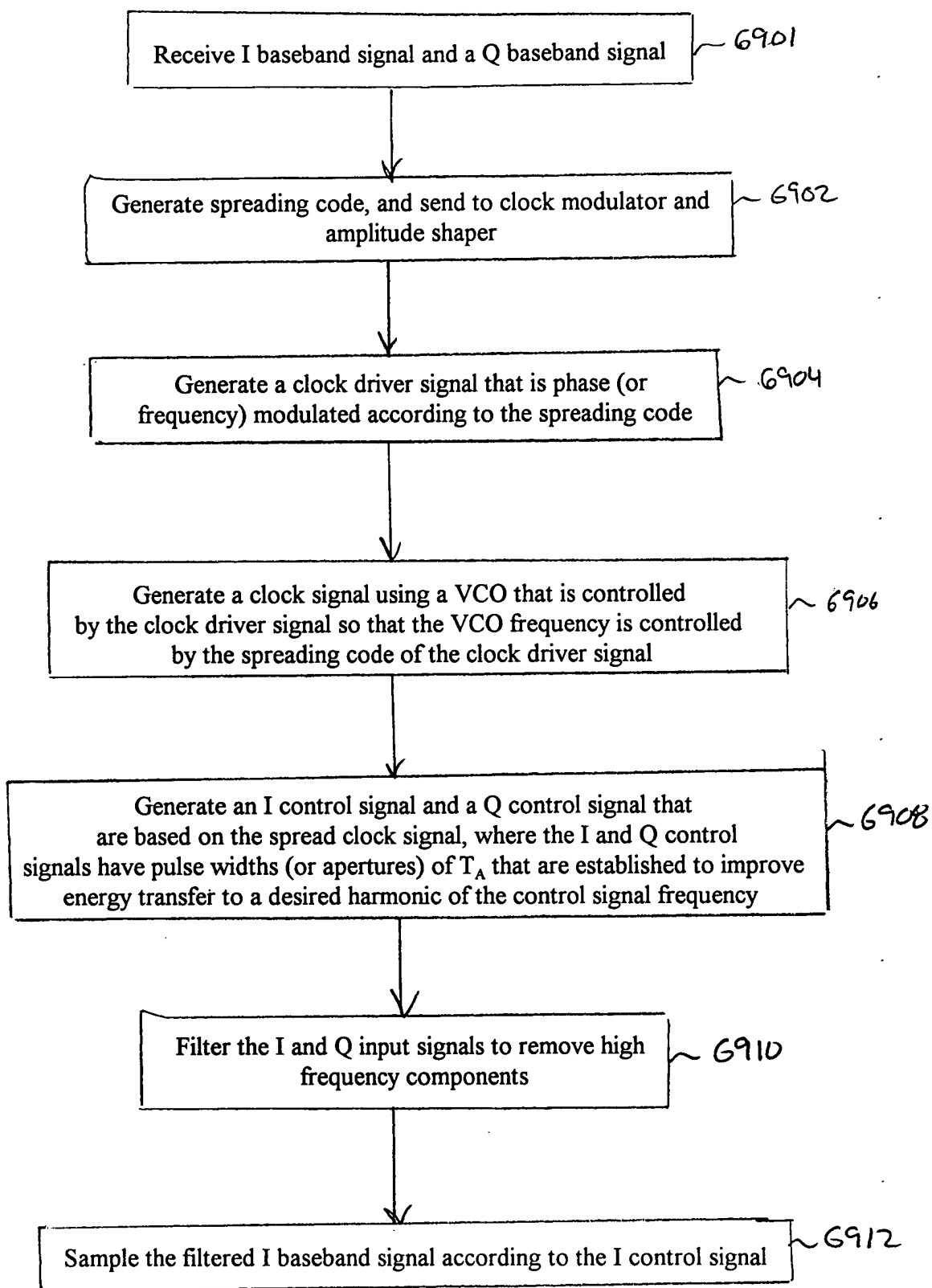


FIG. 69A

6900
(cont.)

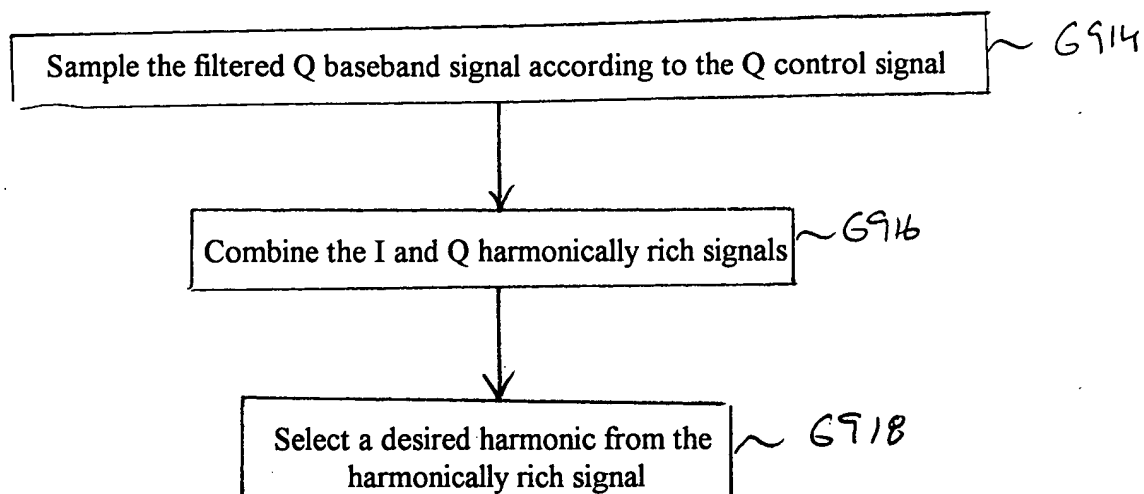


FIG. 6913

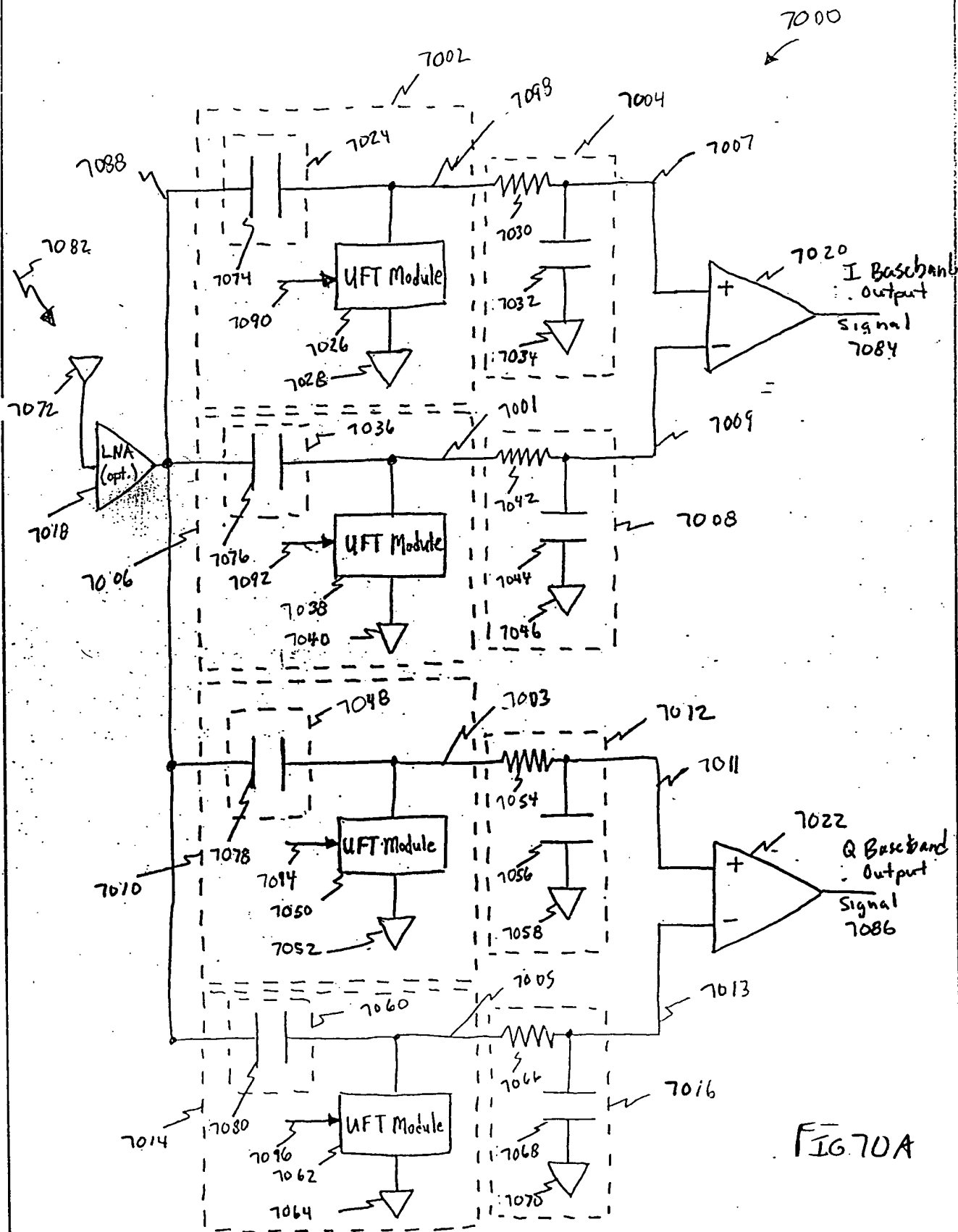


FIG. 70A

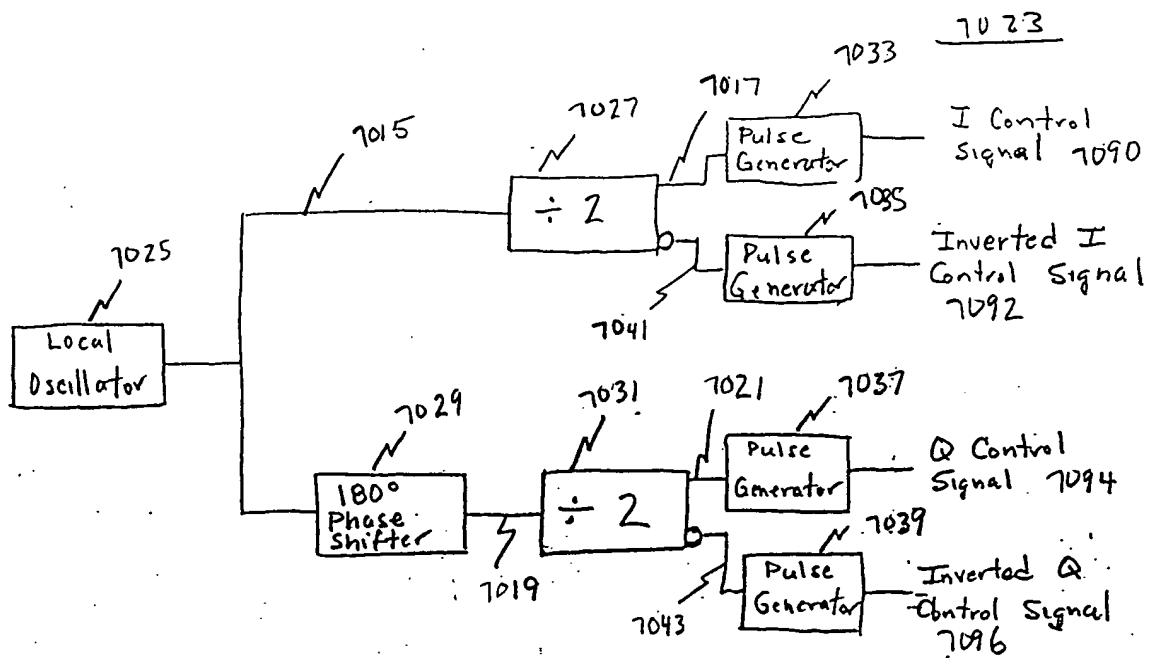


FIG. 70B

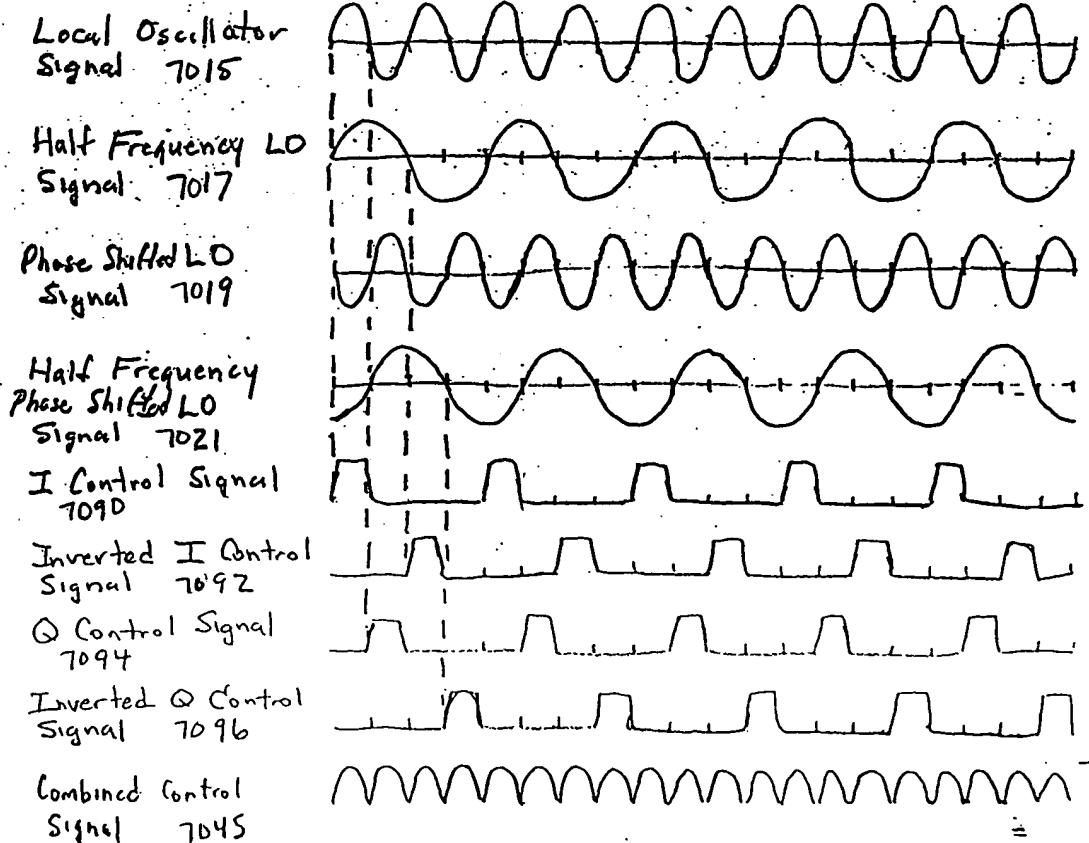


FIG. 70C

(A) IQDEMOD PULSE RELATIONSHIPS TO INPUT RF CARRIER

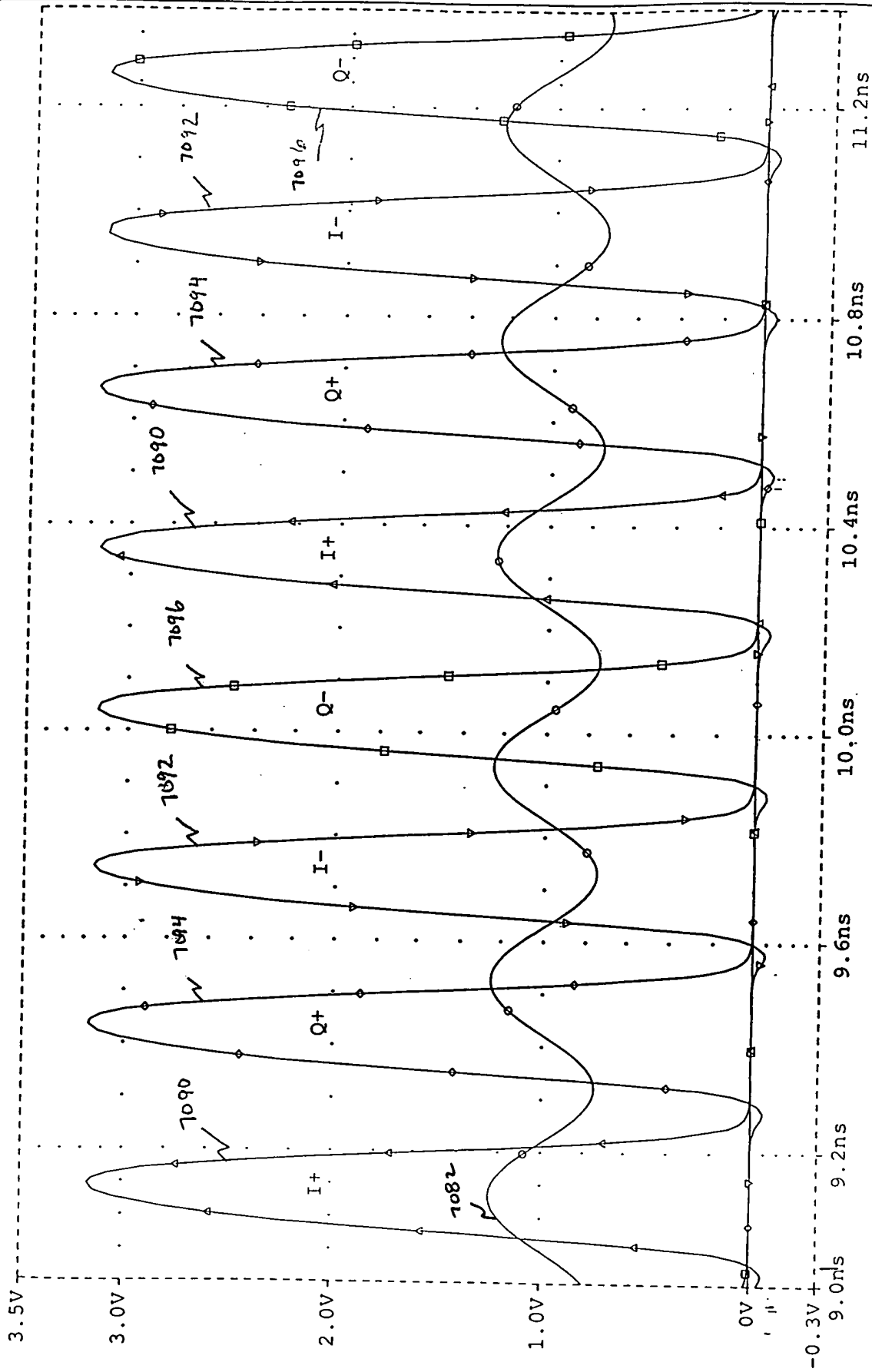


FIG. 70D

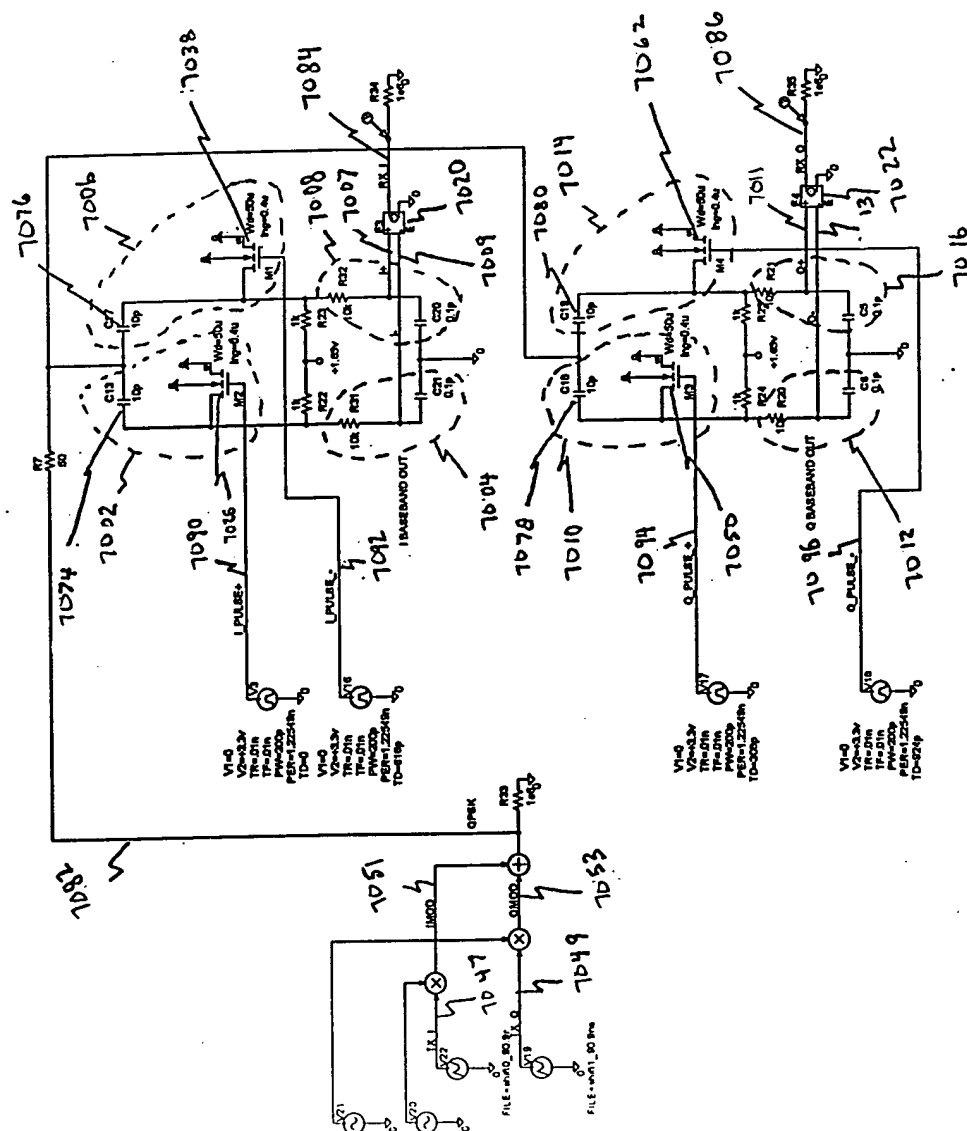
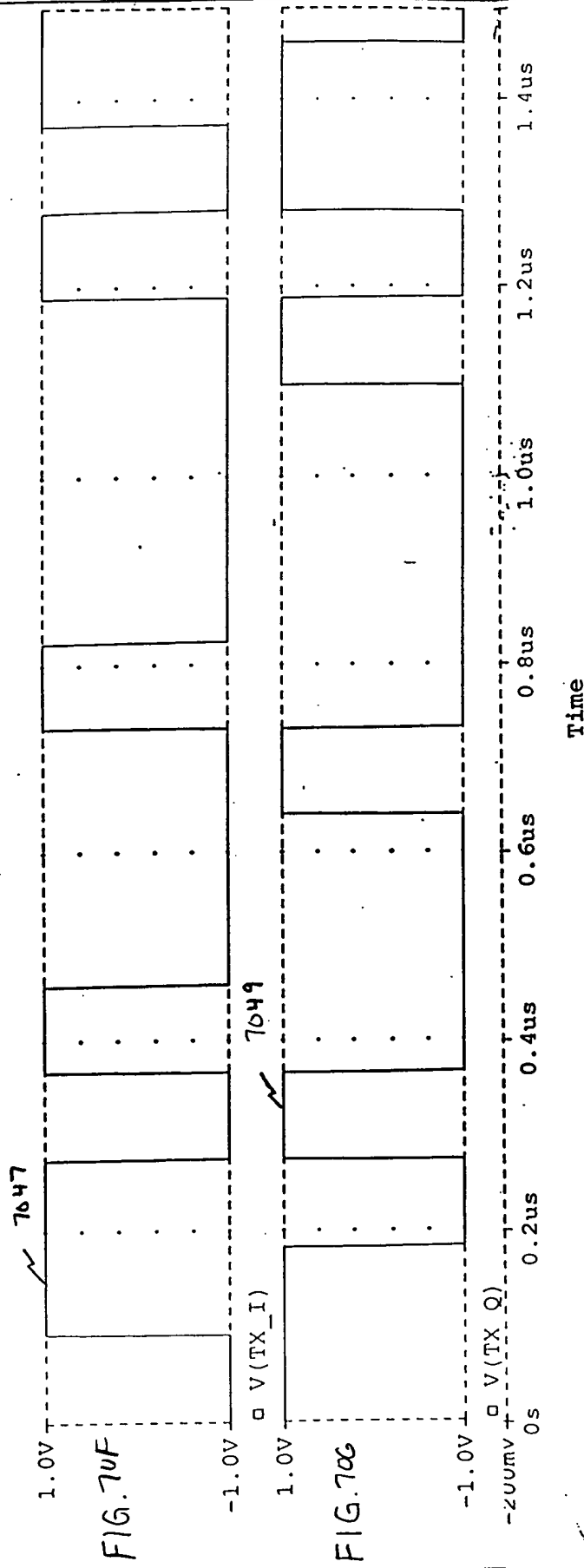
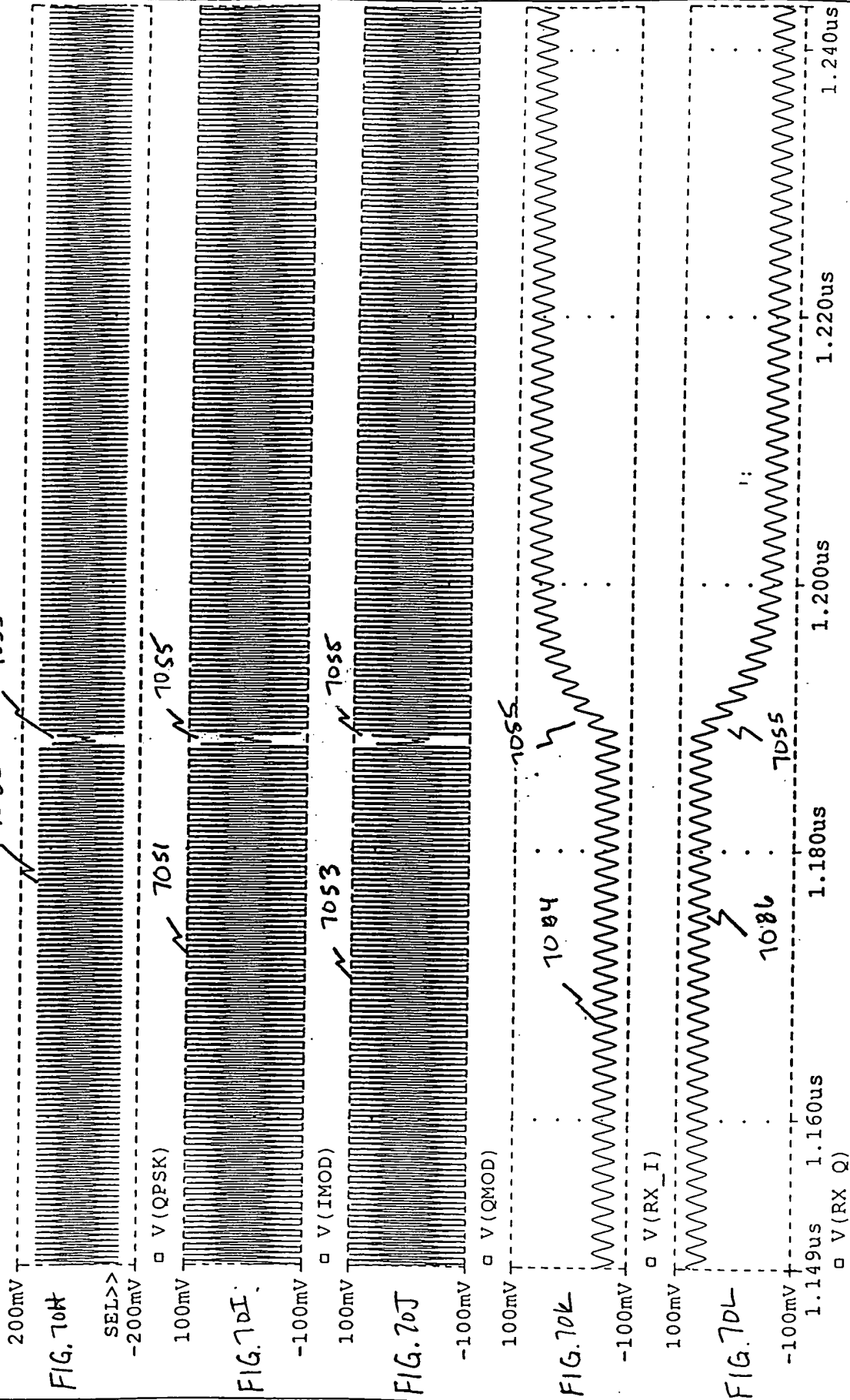


FIG. 70E

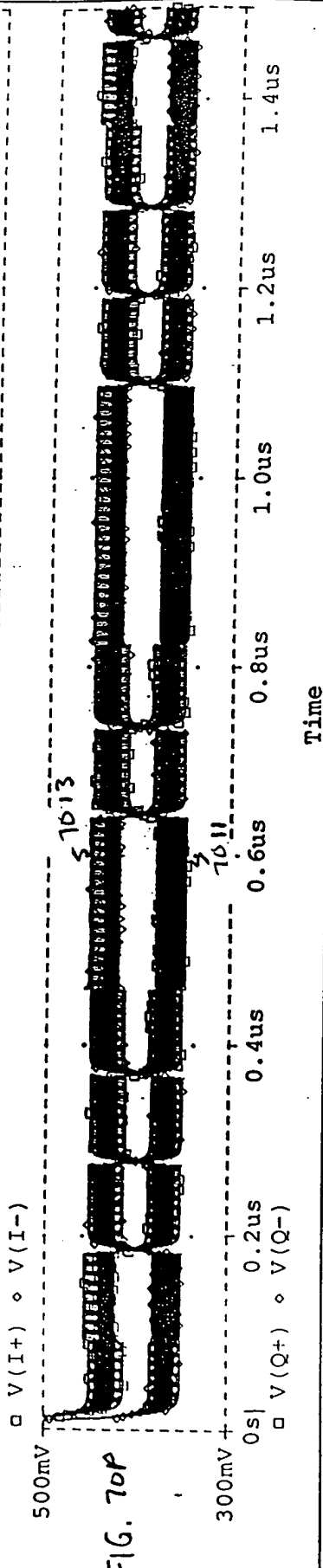
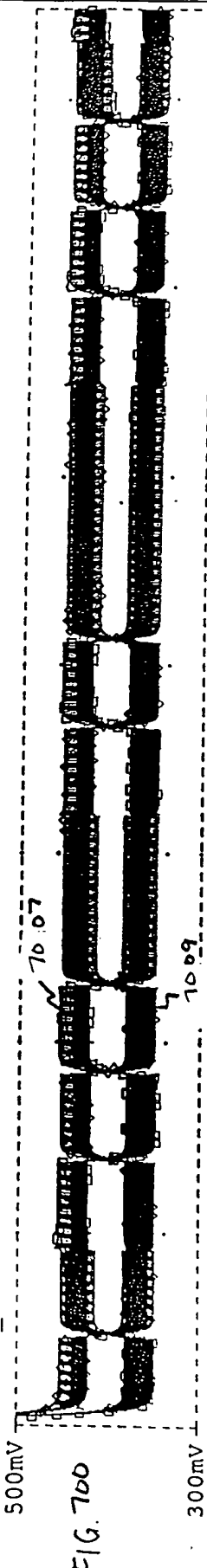
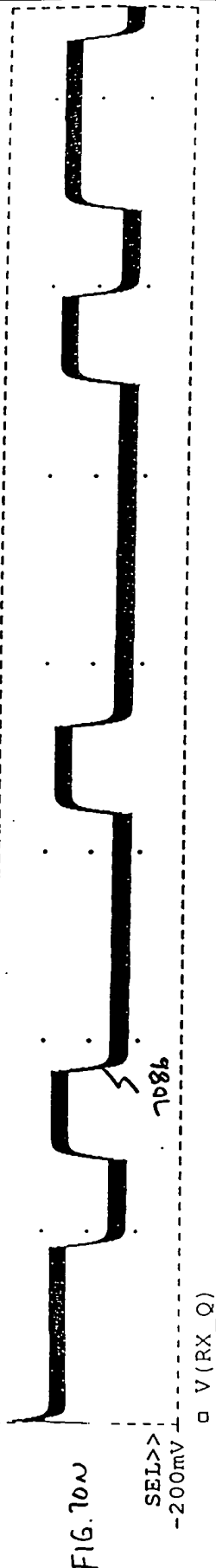
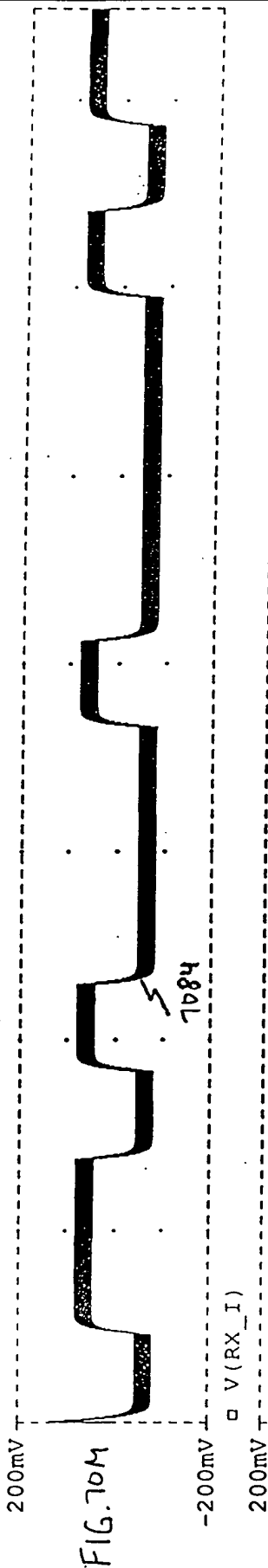
(A) IQDEMOD SHOWING TIME RELATIONSHIP OF TX. I AND Q DATA



(B) IQDEMOD SHOWING QPSK MOD OUTPUT (TOP) WITH IMOD AND QMOD AND I AND Q DATA (BOTTOM)



(B) IQEMOD RELATIONSHIP OF I AND Q RECEIVED DATA DIFFERENTIAL (BOTTOM) AND SINGLE ENDED AFTER DIFF AMP...



004420332500

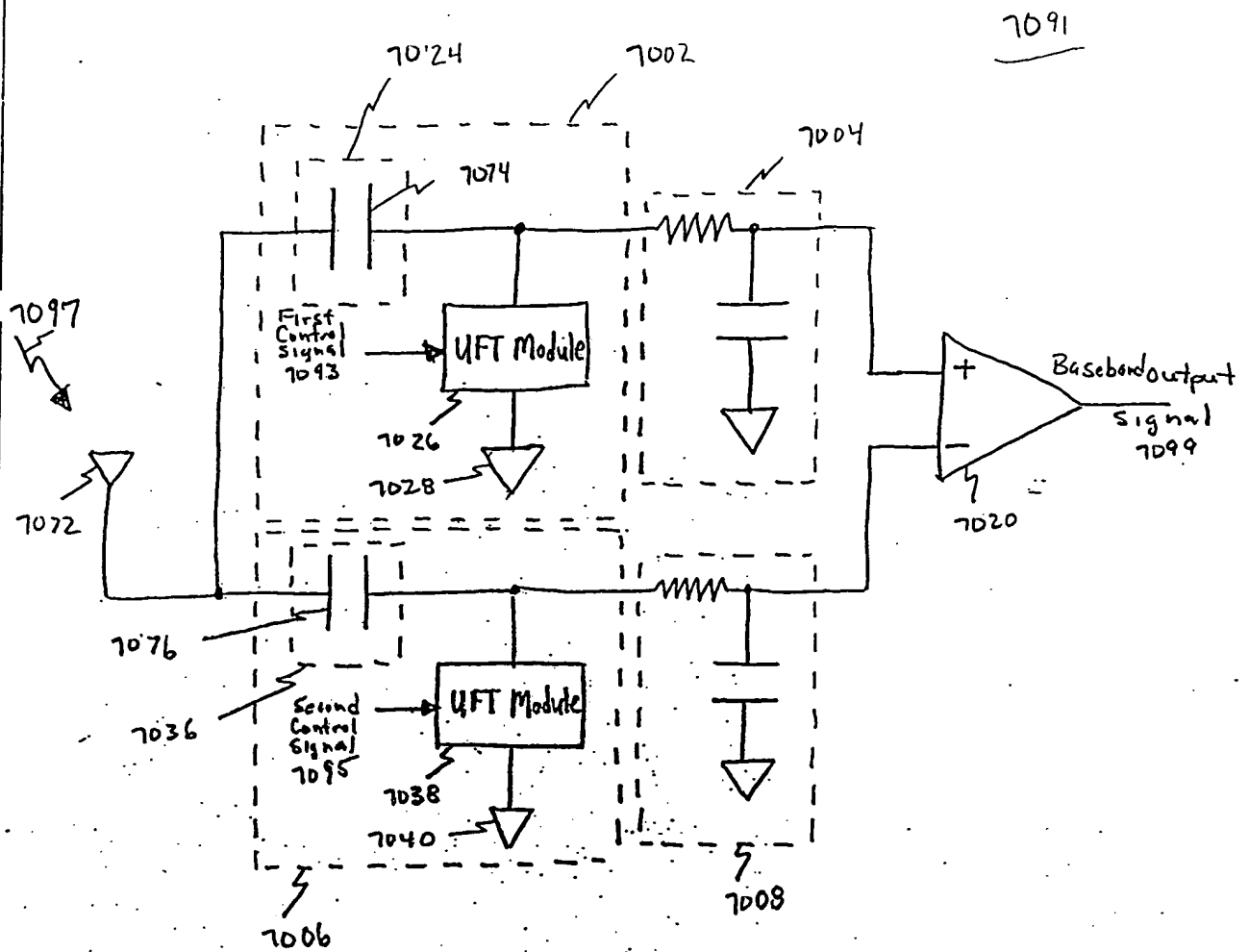


FIG. 70Q

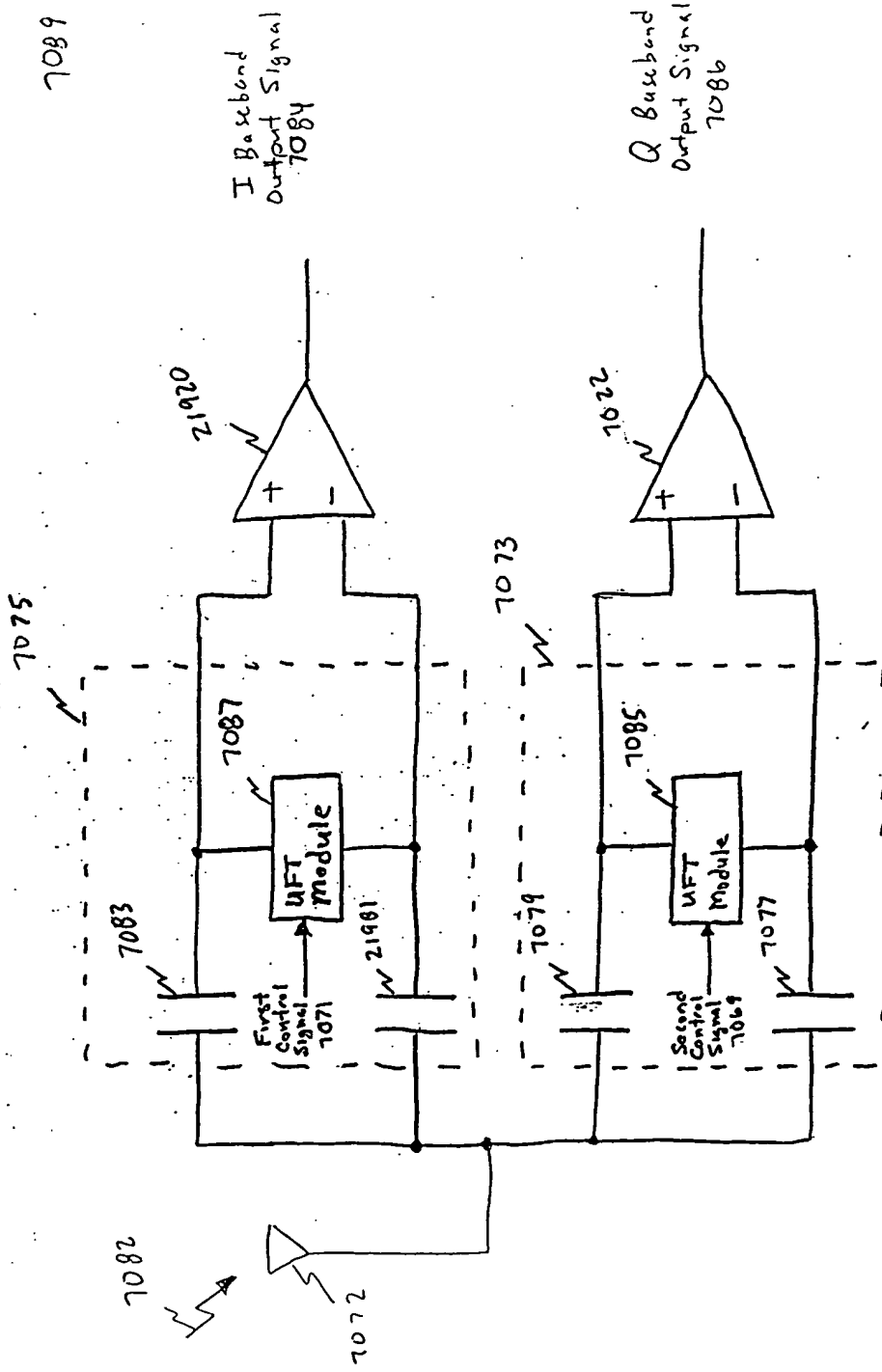


FIG. 70 R

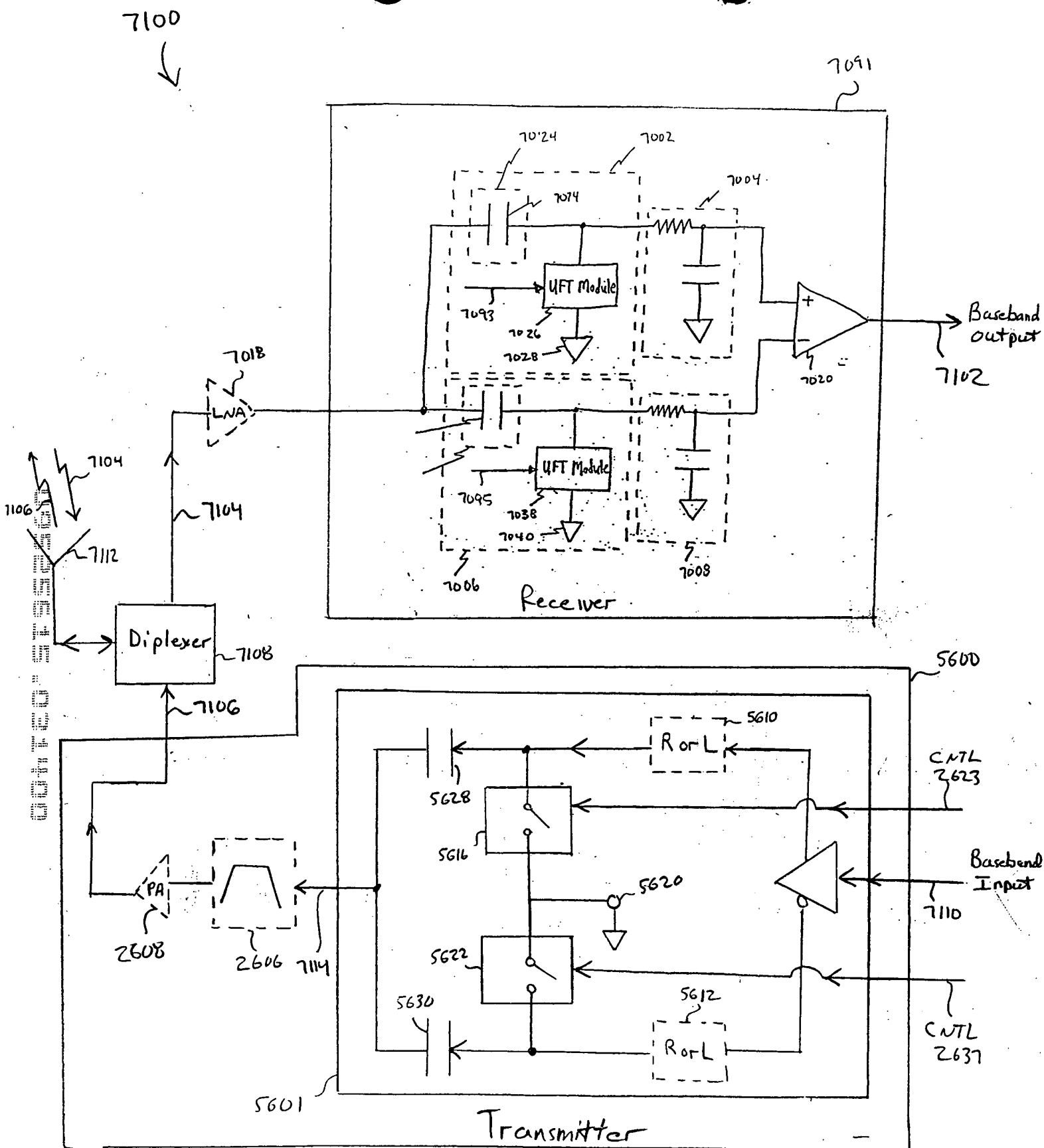
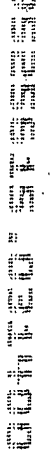


FIG. 71 : Transceiver



7200

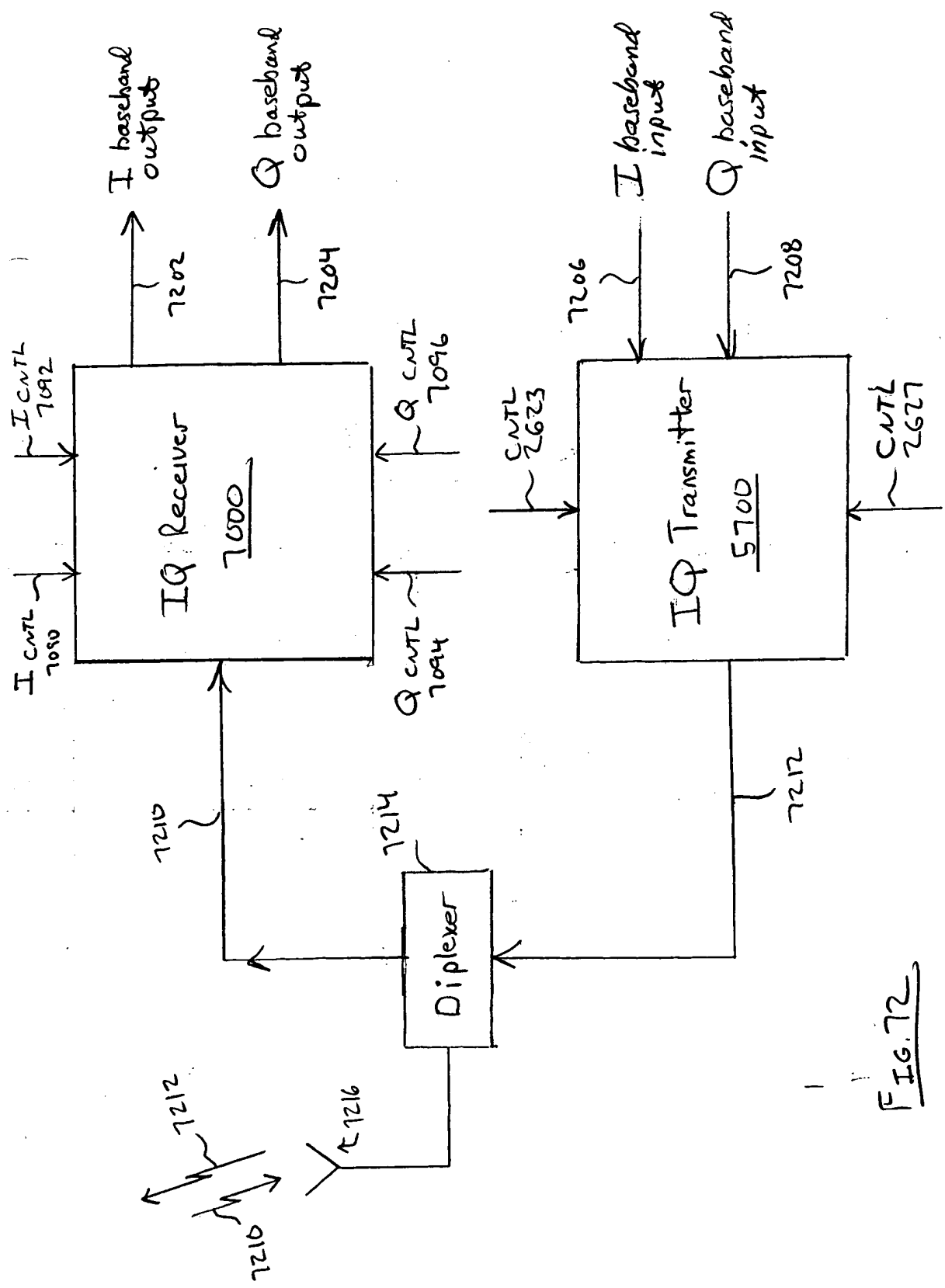


Fig. 72

7300
↓

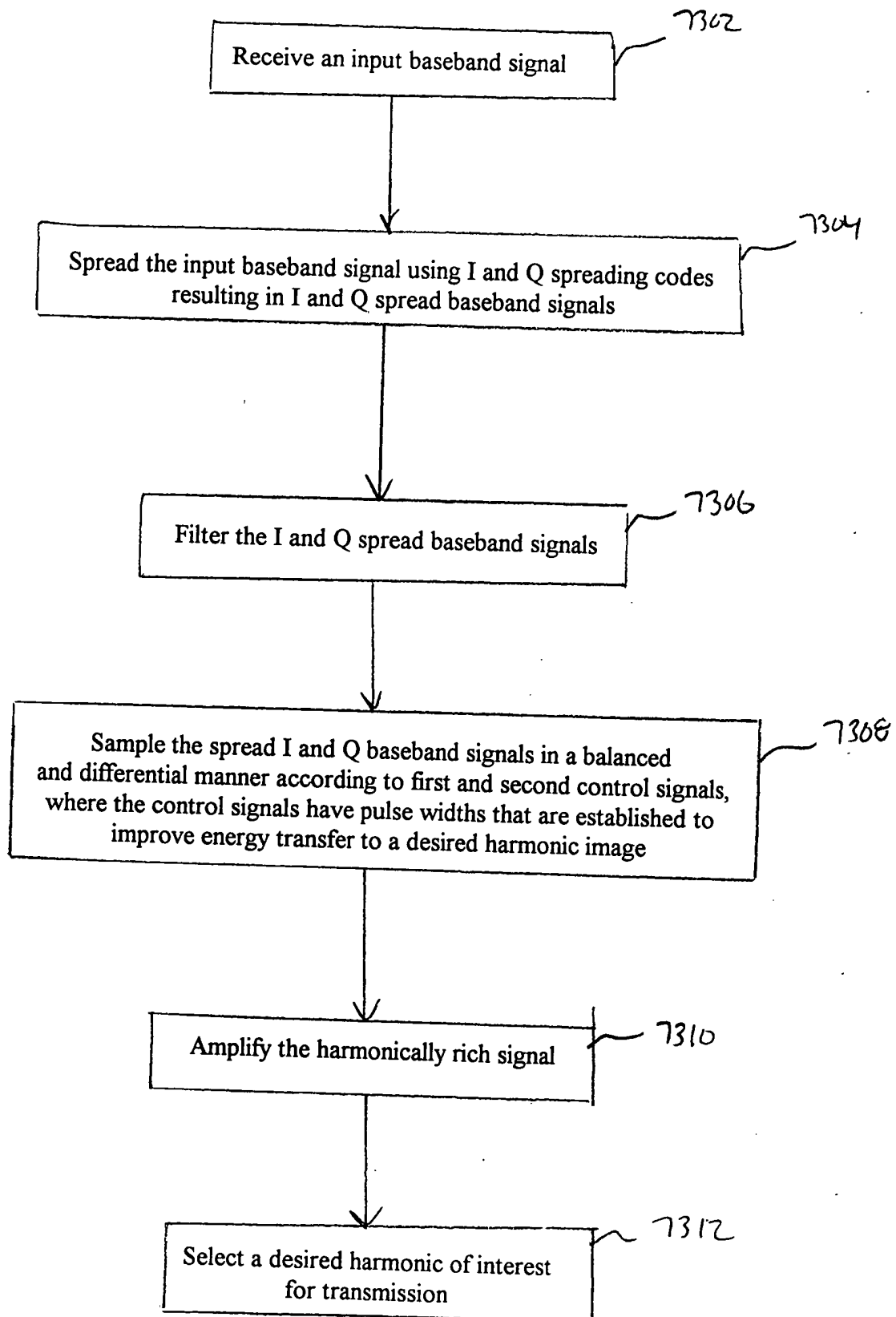


FIG. 73

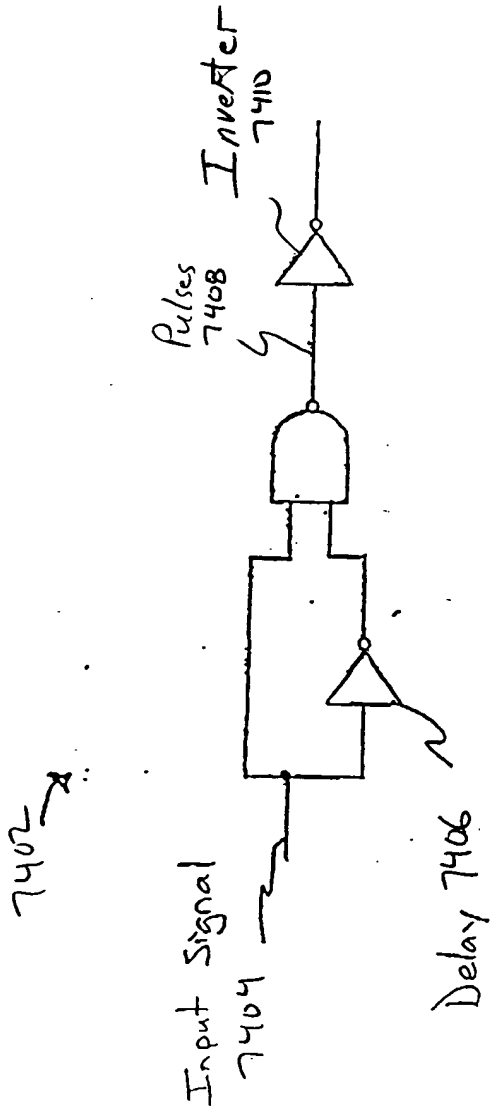


FIG. 74A

FIG. 74B

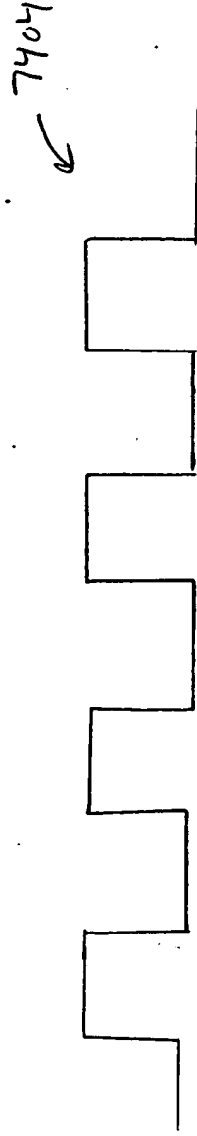
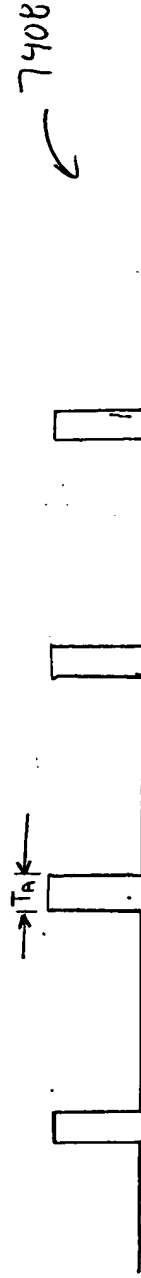
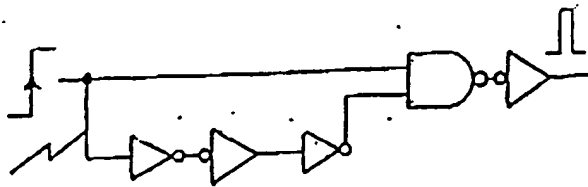


FIG. 74C



004420-335250

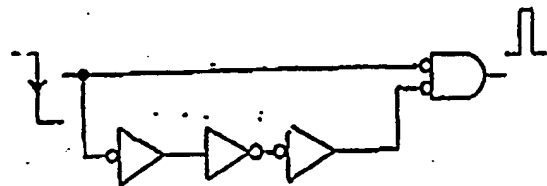
7412
↓



A. rising edge pulse generator

FIG. 74D

7416
↓



B. falling-edge pulse generator

FIG. 74E